HEALTH POLICY ANALYSIS

Project commissioned by the Australian Government Department of Health

Evaluation of the Health Care Homes program

Evaluation plan

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Disclaimer

Health Policy Analysis Pty Ltd

Suite 101, 30 Atchison Street, St Leonards NSW 2065

ABN: 54 105 830 920

Phone: +61 2 8065 6491

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Abbreviations

ABS	Australian Bureau of Statistics
ACCHS	Aboriginal Community Controlled Health Service
AIHW	Australian Institute of Health and Welfare
AMS	Aboriginal Medical Service
APC	Admitted patient care (NMDS)
AR-DRG	Australian Refined Diagnosis Related Group
ASGS-RA	Australian Statistical Geography Standard - Remoteness Area
EWG	Evaluation Working Group
GP	General practitioner
HARP	Hospital Admission Risk Profile (tool)
HCH	Health care home(s)
HREC	Human Research Ethics Committee
IAG	Implementation Advisory Group
ICD-10	International Statistical Classification of Diseases and Related Health Problems (10th Revision)
ICD-10-AM	International Statistical Classification of Diseases and Related Problems, 10th Revision, Australian Modification
LHN	Local Hospital Network
MBS	Medical Benefits Schedule
MM	Modified Monash (remoteness categorisation)
NACCHO	National Aboriginal Community Controlled Health Organisation
NACDC	National Aged Care Data Clearinghouse
NAPEDCD	Non-admitted patient emergency department care database
NHMD	National hospital morbidity database
NMDS	National minimum data set
PBS	Pharmaceutical Benefits Schedule
PHN	Primary Health Network

Executive summary

The Department of Health contracted a consortium led by Health Policy Analysis to evaluate the Health Care Homes (HCH) trial. The trial started on 1 October 2017 and will end on 30 June 2021. Initially the trial was to end in November 2019, but in December 2018, the Australian Government announced an extension. This evaluation plan has been updated to reflect the extension. In addition, it has been updated to incorporate the evaluation of community pharmacies delivering services to HCH patients, which was added to the trial in August 2018.

The purpose of the evaluation is to assess the extent to which HCH is achieving its objectives, and to inform future directions for HCH in Australia.

The evaluation started prior to the program being implemented, to develop the evaluation framework and establish the infrastructure for the evaluation. It will continue beyond the end of the trial to report the findings.

Mainstream general practices and Aboriginal Community Controlled Health Services (ACCHSs) from 10 PHNs (out of 31 Australia-wide) are participating in the trial. For simplicity, in this plan we collectively refer to these as 'practices'. Primary Health Network (PHNs) are also involved, by supporting practices in implementing HCH.

HCH is a variant of the patient-centred medical home (PCMH), which aims to improve the effectiveness of primary care. Features of the Australian implementation are:

- voluntary enrolment of patients to a practice—their health care home—nominating a GP as their preferred clinician
- tools to identify patients at risk of hospitalisation and stratify them to a complexity tier
- a bundled payment for every enrolled patient based on their tier (for services relating to the patient's chronic conditions), replacing the Medicare fee-for-service payment
- patient access to medication management services by a community pharmacy of their choice, and a bundled payment to the pharmacy for these services
- training resources to support transformation of practices towards a HCH model
- support for practices to undertake transformation, provided by PHN practice facilitators
- a system of shared care planning that gives authorised health professionals access to an up-to-date electronic medical record for each enrolled patient
- data sharing
- evaluation of the program.

The program ultimately aims to:

- improve health outcomes for patients with chronic disease
- improve the experiences of patients an and primary care staff
- better manage health care costs.

It is hypothesised that these aims will be achieved through:

- delaying the progression of patients' chronic conditions, and preventing the onset of other conditions

- strengthening the delivery of organised, evidence-based chronic disease management, including addressing patient lifestyle issues and behaviours
- more effectively engaging patients in their care
- strengthening the relationship between primary care and secondary and tertiary care.

Evaluation questions

The objectives of the evaluation are to:

- Describe the process of implementing the HCH program.
- Evaluate the effect of the trial on:
    - Quality of care for patients with chronic and complex conditions.
    - Patient experience of care (including engagement, activation and the patient journey).
    - Practice experience and behaviour (including changes to scope of practice, quality improvement, system development, models of care, service delivery, business models).
    - Service use (particularly potentially preventable hospitalisations).
    - The cost of care for Government, providers and patients.
- Assess the suitability of the HCH model for national rollout for different practice types across a range of contexts.

The key questions set out for the evaluation by the Australian Government Department of Health are:

1. How was the HCH model implemented and what were the barriers and enablers?
2. How does the HCH model change the way practices approach chronic disease management?
3. Do patients enrolled in HCH experience better quality care?
4. What are the financial effects of the HCH model on governments, providers and individuals?

Additional questions for the community pharmacy component are:

5. Is the community pharmacy component a beneficial component of the broader HCH coordinated care model and should it be included as part of any future roll out?
6. Do patients who received medication management services as part of the HCH trial experience better health outcomes than patients who did not?
7. What was the level of engagement between HCH practices and community pharmacy (care coordination)?
8. Is the inclusion of a pharmacy component in HCH financially viable?

Both sets of questions relate to structural, process and outcome dimensions of the program.

It is acknowledged that the short time frame of the trial means that not all the evaluation questions will be able to be answered definitively. Where questions cannot be answered, the information collected for the trial can be built upon and used for any subsequent rollout of HCH. Therefore, one of the objectives of the evaluation is to create an infrastructure for the ongoing evaluation of the program in Australia.

Evaluation design

Practices are regarded as the unit of study for the evaluation, with patients as a 'nested' unit of study within the practices.

The evaluation will use both qualitative and quantitative data. Some of these will be specifically collected for the evaluation (i.e. 'primary' data). The evaluation will also source data that have another primary purpose (i.e. 'secondary' data).

Where possible, a comparison group will be used to assess the changes that are being studied for practices and patients. For these components, the evaluation will have a quasi-experimental design. For others, a before-and-after design will be used.

For practical purposes, data collection for the evaluation is organised into 'rounds'. The time frames for these are shown in the Table below.

Table 1 – Data collection rounds for the evaluation and time frames

Data collection round	Timeframe
Round 1 data collection	1 October 2017 to 30 June 2018
Round 2 data collection	1 July to 31 December 2018
Round 3 data collection	1 January to 30 June 2019
Round 4 data collection	1 July 2019 to 30 June 2020
Round 5 data collection	1 July 2020 to 30 June 2021

Table 2 lists the data collection approaches/ sources that will be used. In the 'Comparator group' column, 'No' means that the data will only relate to the practices or patients enrolled in HCH. 'Yes' means that it is intended that data will be extracted and analysed for both the practices or patients enrolled in HCH as well as other (matched) practices and patients not participating in HCH. The Table also lists the rounds during which the data collection will occur.

Primary data collection will be in relation to the practices and enrolees within those practices, except for the case studies, which will be undertaken in a subset of practices (approximately 20). The secondary data will be for all practices as well as comparator practices and patients.

Table 2 – Evaluation data approaches/ sources

Data source	Collection type	Comparison group	Coverage of pharmacy component	Data collection round
Patient* surveys	Primary	No	Yes	Rounds 1, 4, 5
Practice surveys	Primary	No	No	Rounds 1, 2, 4, 5
Practice staff surveys	Primary	No	Yes**	Rounds 1, 5
PHN surveys	Primary	No	No	Rounds 1, 4, 5
Case studies • Patient* interviews/ focus groups • Practice interviews • Related provider interviews (e.g. pharmacists, allied health) • PHN interviews • Local Hospital Networks (LHNs)/ state & territory health authority interviews	Primary	No	Yes	Rounds 2, 4, 5
HCH program data***	Secondary	No	Yes	Jul 2017-Jun 2021

Data source	Collection type	Comparison group	Coverage of pharmacy component	Data collection round
Risk stratification data	Secondary	Yes	No	Jul 2017-Jun 2021
Practice extracts	Secondary	Yes	No	Jul 2017-Jun 2021
Linked data: • Medical Benefits Schedule (MBS) • Pharmaceutical Benefits Schedule (PBS) • National hospital morbidity data - hospital separations • National non-admitted patient emergency department care data - emergency department presentations • National aged care data – residential aged care admissions, community aged care packages • Fact of death	Secondary	Yes	No	Jul 2015-Jun 2021

** For simplicity, the term 'patient' has been used in this document to refer to data collection relating to HCH enrolees, but also refers to carers and/ or family members of enrolled patients; ** GP survey only; *** Includes data used to manage the program, including from the Department of Human Services and the Community Pharmacy Health Outcomes Data.*

The outputs of the evaluation are a series of reports documenting the findings, presentations, and data for secondary research and/ or that can be built upon for future evaluation of the program.

Introduction

1

Health Care Homes

Health Care Homes (HCH) is one of the responses by the Australian Government to the Primary Health Care Advisory Group's (2015) recommendations for better outcomes for people with chronic and complex health conditions.

HCH is a variant of the patient-centred medical home (PCMH), which aims to improve the effectiveness of primary care. Features of the Australian implementation are:

- voluntary enrolment of patients to a practice—their health care home—nominating a GP as their preferred clinician
- tools to identify patients at risk of hospitalisation and stratify them to a complexity tier
- a bundled payment for every enrolled patient based on their tier (for services relating to the patient's chronic conditions), replacing the Medicare fee-for-service payment
- training resources to support transformation of practices towards a HCH model
- support for practices to undertake transformation, provided by PHN practice facilitators
- a system of shared care planning that gives authorised health professionals access to an up-to-date electronic medical record for each enrolled patient
- data sharing
- evaluation of the program.

Systematic reviews of the impact of the PCMH (Peikes, Zutshi, Genevro et al., 2012, Williams, Jackson, Powers et al., 2012, Jackson, Powers, Chatterjee et al., 2013) and more recent individual trials (Fishman, Johnson, Coleman et al., 2012, Mosquera, Avritscher, Samuels et al., 2014, Friedberg, Rosenthal, Werner et al., 2015, Rosenthal, Sinaiko, Eastman et al., 2015, Fifield, Forrest, Martin-Peele et al., 2013), show mixed findings of PCMH. One of the challenges is the extent to which any one practice/ organisation has implemented the range of components associated with PCMH. Where positive effects have been shown, they have been on patient and staff experience, care processes, and reduced presentations to emergency departments and hospitalisation.

In August 2018, under the Sixth Community Pharmacy Agreement, the Government dedicated funds for HCH patients to receive additional medication management services from a community pharmacy, including:

1. Medication reconciliation and assessing the patient's medicines regimen.
2. Identifying any potential medication-related issues and agreeing on medication management goals.
3. Developing a medication management plan (MMP) in collaboration with the patient and their HCH.
4. Providing regular follow-up reviews with the patient (in consultation with the referring HCH practice).
5. Providing support services for the more complex patients, such as dose administration aids, blood glucose monitoring, blood pressure monitoring and asthma management planning.

The program is accessed by referral of the patient by their HCH to a community pharmacy of their choice. The community pharmacy and the HCH care team are to work together to deliver the MMP.

Involvement of a community pharmacist in HCH-style models has been shown to have benefits in several evaluations, including:

- Improved patient adherence to their medication regimen (Slazak, Kozakiewicz, Winters et al., 2017, Debenito, Billups, Tran et al., 2014, Altavela, Jones and Ritter, 2008), which in turn contributes to improved clinical outcomes.
- Improved patient clinical outcomes, such as:
    - HbA1C and other outcomes for diabetic patients (Prudencio, Cutler, Roberts et al., 2018, Chung, Rascati, Lopez et al., 2014, Brooks, Rihani and Derus, 2007, Pousinho, Morgado, Falcao et al., 2016, Cranor, Bunting and Christensen, 2003)
    - Peak expiratory rates for patients with asthma or chronic obstructive pulmonary disease (Weinberger, Murray, Marrero et al., 2002)
    - Blood pressure control (Migliozzi, Zullo, Collins et al., 2015)
    - Lipid values (Brooks et al., 2007).
- Reduced adverse events associated with medications, leading to reduced ambulatory/ emergency department presentations and/ or hospitalisation (Romanelli, Leahy, Jukes et al., 2015, Matzke, Moczygemba, Williams et al., 2018, Roth, Ivey, Esserman et al., 2013).
- Improved patient experience (McFarland, Wallace, Parra et al., 2014, Ramalho de Oliveira, Brummel and Miller, 2010).
- Reduced costs, including patient out of pocket costs for medicines (Altavela et al., 2008, Tate, Hopper and Bergeron, 2018, Lin, Lin, Chang et al., 2018, Cranor et al., 2003).

The Health Care Homes trial

The Australian Government Department of Health (from here on in referred to as the 'Department of Health' or the 'Department') selected mainstream general practices and Aboriginal Community Controlled Health Services (ACCHSs) ('practices') from across Australia to participate in the trial. These were from 10 regions aligned with the following Primary Health Networks (PHNs):

- South Eastern Melbourne
- Perth North
- Adelaide
- Country South Australia
- Brisbane North
- Western Sydney
- Hunter New England and Central Coast

- Nepean Blue Mountains
- Northern Territory
- Tasmania.

Twenty-two practices started enrolling patients on 1 October 2017. The remaining practices started on 1 December 2017. Initially, practices were to cease enrolling patients by 30 November 2018, with the remaining time in the trial – to 30 November 2019 – focused on practicing as a HCH. In December 2018, the Australian Government announced an extension to the program, extending patient enrolment to 30 June 2019 and the trial to 30 June 2021.

This evaluation plan reflects the updated time line given the extension of the HCH trial. It also incorporates the community pharmacy component, which was announced in August 2018.

HCH evaluation

The evaluation of HCH has been established as a project for which there is a separate plan describing the phases and steps in the evaluation and key dates. These are summarised in Table 3.

Table 3 – Project phases and steps and time frames

Phase	Step	Time frame
1 Planning and design phase	Initial project initiation and planning, including: • Project plan • Evaluation plan • Evaluation infrastructure • Ethics approvals	Jan-Dec 2017
2 Conduct phase	Round 1 data collection	Oct 2017-Jun 2018
	Round 2 data collection	Jul-Dec 2018
	Round 3 data collection	Jan-Jun 2019
	Round 4 data collection	Jul 2019-Jun 2020
	Round 5 data collection	Jul 2020-Jun 2021
3 Reporting phase	Draft and final reports of the evaluation	Jul 2021-Dec 2021

The evaluation plan is a component of the Phase 1. The plan specifies the design of the evaluation, including:

- the questions to be answered by the evaluation
- the overall study design and methods to be used for answering the questions
- the measures to be used to show changes
- the sources of data, primary (qualitative and quantitative) and secondary, that will be collected/ accessed for the evaluation
- data collection/ sourcing methods
- a plan for statistical and qualitative analysis
- a dissemination plan.

The evaluation plan was developed in consultation with key stakeholders, including the Evaluation Working Group (EWG) and the Implementation Advisory Group (IAG) established by the Department of Health to oversee the evaluation, and the overall design, implementation and evaluation of HCH respectively.

Following finalisation of the evaluation plan, ethical approval for the study will be sought from

appropriate human research ethics committees (HRECs).

Development of the evaluation plan

The starting point for the development of the evaluation plan involved articulating the theory of change for HCH, and a review of the logic model for the program. These tools helped to clearly articulate outcomes of the program and the cause and effect relationships expected, and led to a succinct set of questions on which the evaluation would focus.

Because the evaluation is seeking to a show a causal relationship between practices' and patients' participation in the program and key outcomes, an experimental design is preferred. However, this requires random assignment to groups (intervention and control), which was not possible given the design of the implementation, namely, that practices were invited to express their interest in participating, and that practices have been selected from the applications received. Random assignment of patients invited to participate in HCH is also not possible given that a policy decision was made for practices to invite patients to participate based on the benefit that they would receive from the program (based on the treating clinicians' consideration of the patient's risk of hospitalisation using a risk assessment tool). Therefore, a quasi-experimental design has been selected for the evaluation where possible. This involves the use of 'controls' (referred to as 'comparators' in this report), but assignment to the intervention or comparator group is not random. For other aspects of the evaluation, a before-and-after study was the only option due to the inability to assign comparators.

To develop measures for the evaluation, a literature review of systematic reviews of models similar to HCH was undertaken (including Peikes et al., 2012, Williams et al., 2012,Jackson et al., 2013), as well as some of the key individual evaluations of these models (e.g. Fishman et al., 2012, Mosquera et al., 2014, Friedberg et al., 2015, Rosenthal et al., 2015, Fifield et al., 2013). This analysis provided information on the broad measurement areas and specific measures that had been used in previous studies. These were grouped into the following areas:

- structural features of practices, including the extent to which the practice reflects the attributes of a HCH
- processes of care, including care planning, chronic disease management, preventive measures
- use of health services, including of primary care, secondary care, emergency departments and hospitals
- patient experience of care, including overall assessment and experience of specific aspects of care relevant to the HCH intervention
- outcomes measured through patient reports
- outcomes measured through biophysical or clinical markers
- outcomes measured through proxy indicators derived/ implied from analysis of pharmacy, hospital and other data
- outcomes related to mortality
- primary care provider experience
- costs of care.

Within each of these areas, the evaluation team reviewed candidate instruments for the evaluation. The team considered whether:

- the instrument addresses the key questions of the evaluation
- the rigour with which the instrument was developed and validated
- the use of the instrument in previous evaluations of models similar to HCH
- the extent to which the instrument provided appropriate methods to summarise responses to individual items across a small set of domains
- the time required for respondents to complete the instrument
- fees associated with using the instrument.

Where there was not a single instrument that covered the questions specifically needing to be addressed in this evaluation, the questions were drawn from more than one source.

The team also considered administration of the instruments to maximise responses (including specifically for Aboriginal and Torres Strait Islander people), but be within the budget available for the evaluation.

Document content

This document presents the plan for evaluation, outlining:

- The theory of change for HCH, articulating the causal pathways between the outcomes expected of a program and the inputs and activities that will achieve these (**Chapter 2**).
- The components of the HCH program, including resources (i.e. 'inputs'), activities, outputs, and the changes or benefits that are expected from the program (outcomes) (**Chapter 2**).
- The questions to be addressed in the evaluation and how these relate to the program components (**Chapter 3**).
- The evaluation design, including how data collected through the evaluation (qualitative and quantitative) will be used to respond to the evaluation questions (**Chapter 4**).
- Primary data that will be collected through the evaluation (**Chapter 5**).
- Secondary source of data that will be drawn on for the evaluation (**Chapter 6**).
- The plan for undertaking the economic analyses (**Chapter 7**).
- The plan for undertaking other data analysis, including statistical and qualitative analyses (**Chapter 8**).
- Ethical considerations related to the conduct of the evaluation and how these will be addressed (**Chapter 9**).
- The plan for disseminating the methods and findings from the evaluation (**Chapter 10**).

2 HCH theory of change and logic model

HCH theory of change

Underlying HCH is a theory of change articulating the causal pathways between the outcomes expected of a program and the inputs and activities that will achieve these. The theory of change is an important component of evaluation as it can help to explain why HCH did or did not work in certain contexts or for specific groups. The theory of change for HCH is shown in Figure 1.

The ultimate aims of the HCH program are improved health outcomes (defined as improved health-related quality of life, including functional outcomes, and mortality/ life expectancy) and improved experience of primary care for patients enrolled in the program, and better control of health care costs. These align closely with the triple aims of the Institute for Healthcare Improvement (IHI) (Stiefel M and K., 2012), and the health system goals identified by the World Health Organization (WHO) in its health systems report framework (Murray and Evans, 2003; World Health Organization, 2000). The HCH trial will focus on patient experience, which encompasses system responsiveness according to IHI and WHO, and is considered as a distinct outcome that is valuable in and of itself.

Working back from these outcomes is a series of conditions required to achieve them. The first of these relates to delaying the progression of chronic disease, and preventing the onset of other health problems.

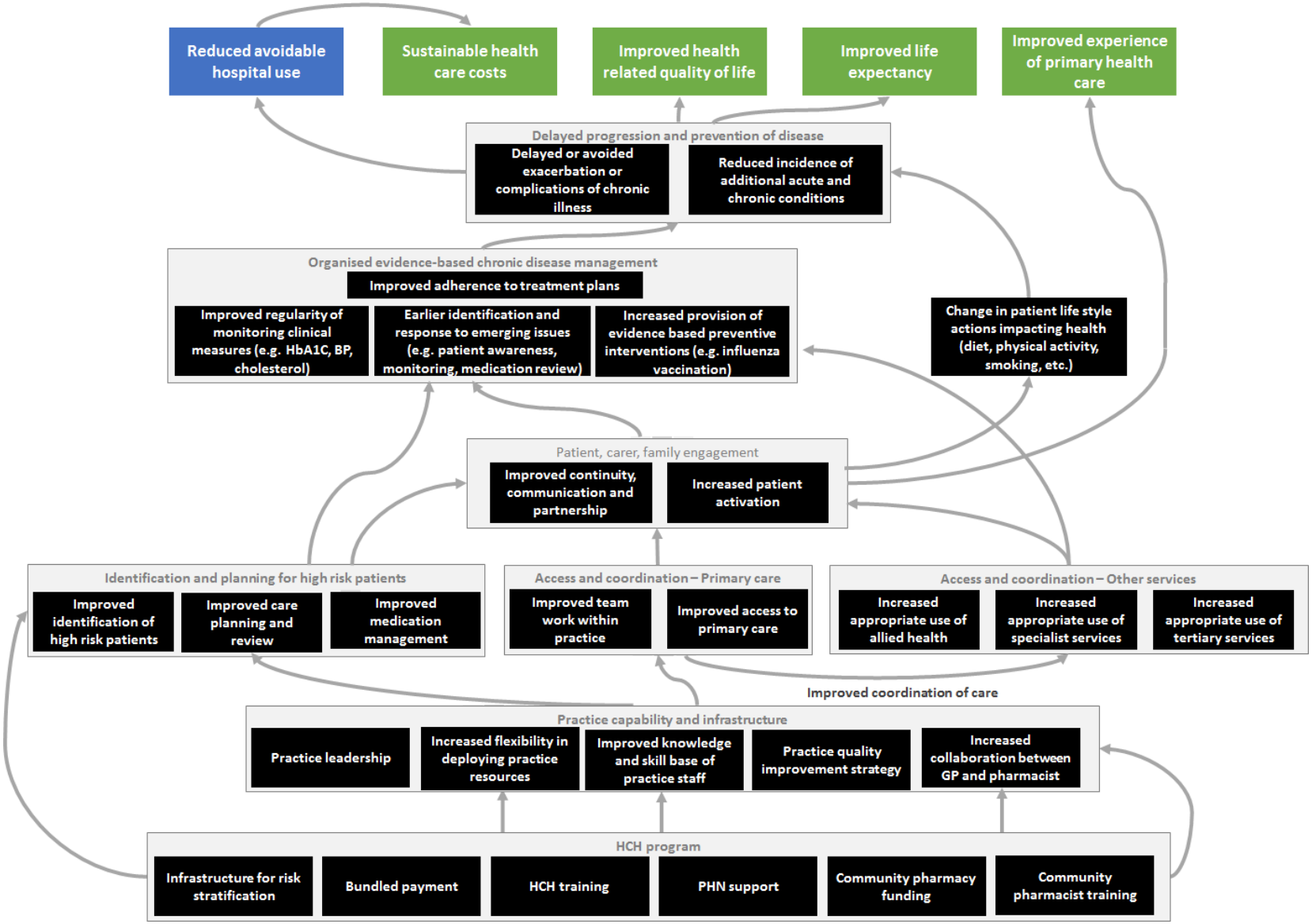
The next relates to organised, evidence-based chronic disease management, including addressing patient lifestyle issues and behaviours.

Following this is the engagement of patients in their care, and the relationships with secondary and tertiary care. A specific feature of the HCH program is the implementation of better methods for identifying high risk patients and planning care with these patients, and access of patients to medication management via local pharmacists. Improved patient engagement is another intended result, along with improved access and coordination.

Underpinning these conditions is the capacity of primary care practices and infrastructure available to support practices.

To bring about the conditions required to achieve the desired outcomes, the HCH program entails: infrastructure to support risk stratification, a bundled payment system to support greater flexibility in the delivery of chronic care, training focussed on increasing the capability of primary care staff in implementing HCH, and support from PHNs in these processes.

Figure 1- Theory of change model



Program logic

Logic models graphically illustrate program components, clearly identifying the resources that go into the program (i.e. 'inputs'), the activities carried out as part of the program, the outputs that are expected to be produced by undertaking the activities, and the changes or benefits that are expected from the program (outcomes). Outcomes can be categorised into short, medium and long term.

An important use of the model is that it provides an overview of the features of the intervention (the HCH program) that should be described and examined through the evaluation.

Figure 2 sets out a logic model for the HCH evaluation. To assist the interpretability of the program logic model, the model is presented at four levels:

- The program level, which is principally concerned with the activities, outputs and outcomes at the national level.
- The PHN/regional level, which focusses on the context of the program within each PHN and region, and considers the issues and outcomes of the program at that level. At this level, state/territory and Local Hospital Network (LHN) initiatives are also important, such as how the practices have leveraged or integrated these initiatives in their implementation of HCH.
- The practice level is focussed on how practices have responded to the opportunities available through the HCH program, the changes implemented within practices, and how these have contributed to improved approaches to chronic disease management. This level also includes the community pharmacies delivering the medication management services to patients referred by the HCH practices.
- The patient level considers the impact of the program for patients and their carers and families, including the extent to which the program has resulted in a better experience of primary care, greater engagement, reduced number/ severity of medication issues and adverse events, improved outcomes, reduced unnecessary presentations to emergency departments and hospitalisations, and delayed entry into residential care.

For each level of the model, elements have been identified related to inputs, activities, outputs, short-term outcomes (i.e. those for which a change could be expected to be observed after two years of implementation) and medium-term (two to five years) to long-term (six to 10 years) outcomes.

Figure 2 - Program logic of the HCH trial

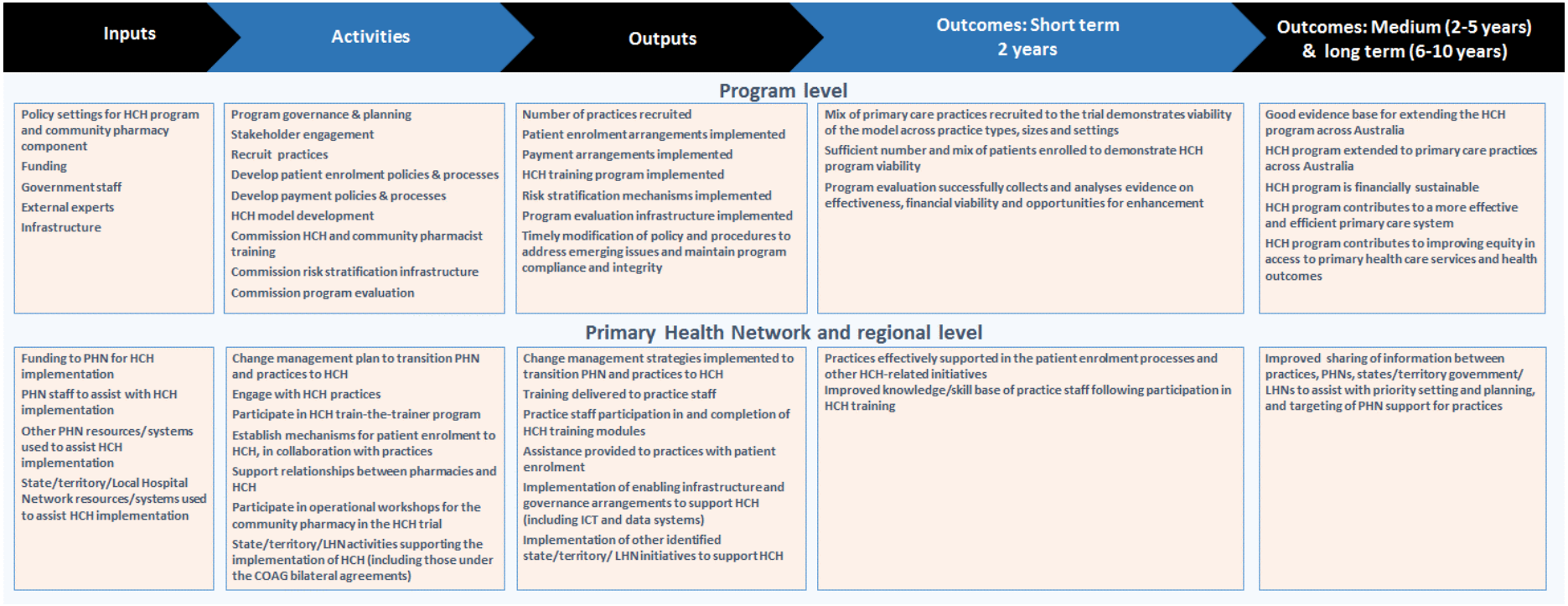


Figure 2 - Program logic of the HCH (continued)

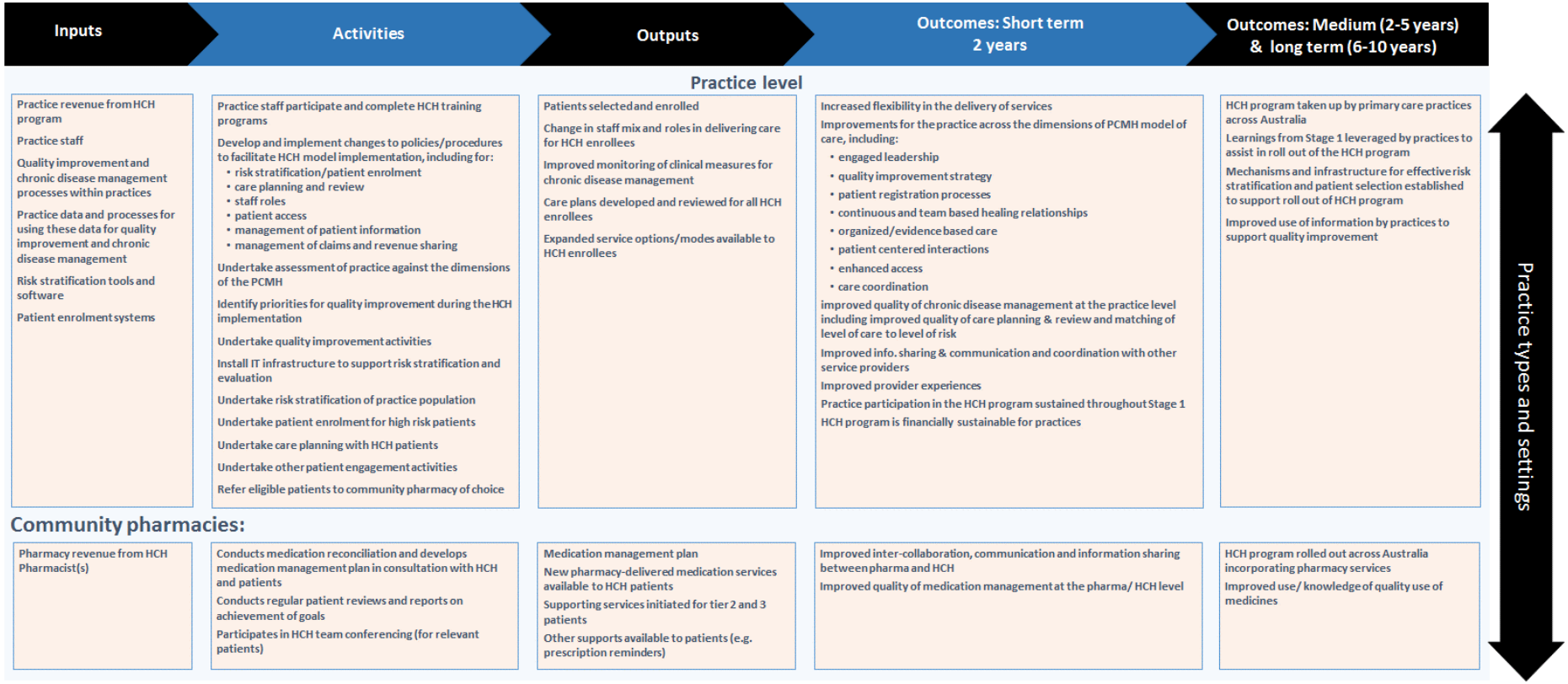
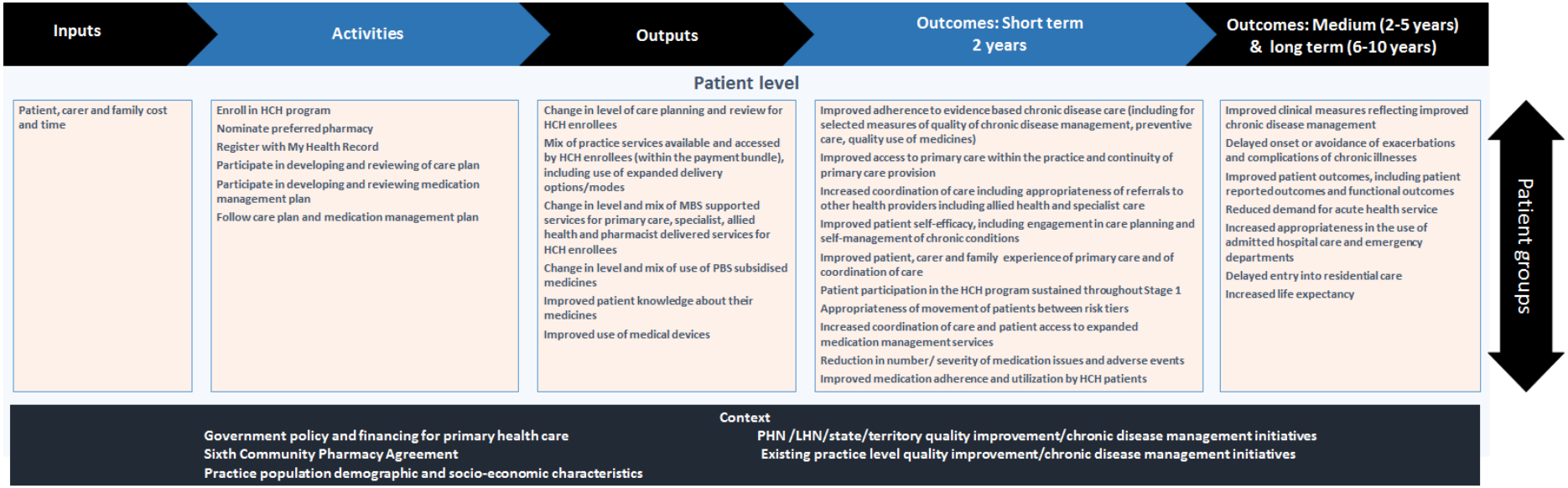


Figure 2 - Program logic of the HCH (continued)



Defining success

The evaluation is of the HCH trial, and thus is focussed on the short-term outcomes listed in the logic model. At the end of the trial, at the program level, success will entail:

- An appropriate mix of practice types participating in the program to show viability of the model for different practices.
- A sufficient number and mix of patients enrolled in the program to show the viability for patients at different risk levels.
- Financial viability of the program, or that the changes required to achieve financial viability are feasible.

At the practice level, success will be shown by:

- Movement along the dimensions of the patient centred medical home, particularly those specifically related to chronic disease care.
- Positive experiences of practice staff, for example, in more meaningfully engaging with patients, and in working within the maximum scope of their roles.
- Financial viability for the range of practices in which it is implemented, or that the changes required to achieve financial viability are feasible.

For patients and their carers and families, success at the end of the trial will be shown by:

- Improved experience of primary care, including experience of coordination of care.
- Increased levels of evidence based chronic disease care.
- Improved level of activation, including greater engagement in care planning and self-management of chronic conditions.
- No significant impact on costs to receive health care.

The evaluation will also seek preliminary evidence on some medium to long-term outcomes, such as the impact on hospitalisations of HCH patients, and the impact on health outcomes.

Conclusions on whether there have been positive outcomes in these areas will be based on statistical evidence that HCH practices and patients have changed following the implementation of the HCH model relative to the changes observed for comparator practices and/ or patients (where comparators are available), or from before the implementation of the HCH model. These findings will be supplemented by qualitative analysis of the experiences of patients, and HCH practice staff.

Another goal of the trial is to articulate learnings that have implications for the design of the HCH program for subsequent rollout. In this sense, success of the program entails that the recommended changes to the program are feasible from the perspectives of the various stakeholders (i.e. patients, practices, regional organisations and governments).

3 Evaluation questions

The purpose of the evaluation is to assess the extent to which HCH is achieving its objectives (summative evaluation), and inform the future directions of the program (formative evaluation).

The evaluation is focused on identifying the changes in structure and processes that occur following the rollout of HCH. The evaluation will seek to measure short-term outcomes of the program and provide preliminary evidence concerning the medium- to longer-term outcomes.

The key questions posed for the evaluation are:

1. How was the HCH model implemented and what were the barriers and enablers?
2. How does the HCH model change the way practices approach chronic disease management?
3. Do patients enrolled in HCH experience better quality care?
4. What are the financial effects of the HCH model on governments, providers and individuals?

Additional questions for the community pharmacy component are:

5. Is the community pharmacy component a beneficial component of the broader HCH coordinated care model and should it be included as part of any future roll out?
6. Do patients who received medication management services as part of the HCH trial experience better health outcomes than patients who did not?
7. What was the level of engagement between HCH practices and community pharmacy (care coordination)?
8. Is the inclusion of a pharmacy component in HCH financially viable?

These questions have several dimensions. Therefore, a set of more detailed questions have been developed for each of the key questions. Each key questions is described below, followed by tables listing the related detailed questions and measures to be used to respond to the questions. The relationship of each detailed question to the columns of the logic model (i.e. inputs, activities, outputs, short term outcomes, and medium to long term outcomes) is also shown.

Key question 1: How was the HCH model implemented and what were the barriers and enablers?

This question mainly relates to the inputs and activities columns of the logic model at the program and PHN/regional levels. (Implementation activities undertaken by practices are addressed under key question 2.) Key question 1 is principally concerned with what activities were undertaken towards implementing the HCH program, quantifying the resources used for this, and systematically presenting the lessons on the factors that facilitated or hindered implementation. Detailed questions are shown in Table 4.

At the **program level** a comprehensive and accurate description of the program objectives is required, as well as program level inputs and activities undertaken to support implementation, and the policy and regulatory framework. Based on analysis of evidence

around the trial, the evaluation should identify the ways in which the design of the HCH program could be improved in subsequent rollouts to better achieve the program's objectives.

Consideration of implementation activities at the **PHN/ regional level** is also required. This will entail describing PHN efforts to plan for and support the HCH program implementation, and support practices in recruiting patients, and provide training to practice staff. PHNs will leverage existing initiatives and infrastructure and build on existing processes for engaging with practices, and these should be described. Perspectives from PHNs and practices will be important for identifying the opportunities and challenges for enhancing PHN support in the next stage of HCH. At this level, state/territory and LHN initiatives will also be used to assist HCH implementation (including those under the Council of Australian Governments bilateral agreements), and these also need to be described, and the extent to which these are leveraged by practices assessed.

Table 4 – Detailed evaluation questions and measures relating to Key question 1

Key question 1: Detailed questions	Key question 1: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
Level: Program						
1.01 What program level activities were undertaken to assist implementation, including program governance, planning, risk management, stakeholder engagement, development of policies and procedures, and HCH model development?	1.01.01 Description of program implementation activities undertaken.		✓			
	1.01.02 Opportunities for improving program-level activities in subsequent rollouts of the program most frequently identified by stakeholders.					✓
1.02 How were practices recruited to participate in the HCH program? What were the characteristics of practices that were accepted to participate in the HCH program? Did this yield an appropriate mix of practice types and settings for testing the first stage of the program's rollout? Did the practices recruited enrol a sufficient number and mix of patients to demonstrate HCH program viability?	1.02.01 Description of practice recruitment activities undertaken.		✓			
	1.02.02 Number of practices applying and recruited by the study strata, including Modified Monash (remoteness) categories, ownership structure, practice size and staff categories (GP only, GP + Practice Nurse, GP + Practice Nurse + Other clinical staff).			✓		
	1.02.03 Number of practices recruited is at least 10 for each of the study strata.				✓	
	1.02.04 Number of patients enrolled from HCH practices is at least 100 for each of the study strata.				✓	
	1.02.05 Frequency of categories of factors influencing the practice to participate in the HCH program.					✓
	1.02.06 Proportion of HCH practice populations by Modified Monash (remoteness) categories.				✓	
	1.02.07 Opportunities to encourage wide recruitment of practices in subsequent rollouts of the program most frequently identified by stakeholders					✓
1.03 How was HCH training strategy implemented at the national level? What training was provided to HCH practices? What was the level of participation by practice staff in training? How effective was HCH training in enhancing practice staff knowledge and understanding of the HCH program, the patient centred medical home, and the approach for implementing change within the practice? Which approaches to training were most successful?	1.03.01 Description of activities undertaken and arrangements for HCH training for the trial.		✓			
	1.03.02 Number of HCH practice staff who participated in PHN-delivered training, by staff category.			✓		
	1.03.03 Proportion of HCH practice staff (based on head count) who participated in PHN-delivered training, by staff category.			✓		

Key question 1: Detailed questions	Key question 1: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
	1.03.04 Number of HCH practice staff who completed the online HCH training program modules, by staff category (by module and overall).				✓	
	1.03.05 Proportion of HCH practices from which practice staff participated in PHN-delivered training.			✓		
	1.03.06 Tools most frequently identified by practice staff as being the most helpful in the HCH implementation.					✓
	1.03.07 Training modules most frequently identified by practice staff as being the most helpful in the HCH implementation.				✓	
	1.03.08 Improvements in HCH training most frequently identified by practices and PHNs.					✓
1.04 What infrastructure and processes were commissioned to support processes for risk stratification and patient enrolment? In what ways could processes and infrastructure for risk stratification and enrolment of patients be improved? How well did the risk stratification model and processes predict hospitalisation and use of other health care services? Was there sufficient information available in practice data and other sources to allocate to risk categories? What are the implications of applying the risk stratification and patient selection processes more broadly across Australian primary care practice populations? What improvement would be expected if the risk stratification process included additional data sources?	1.04.01 Description of activities undertaken and arrangements for risk stratification and patient enrolment for the trial.		✓			
	1.04.02 Performance of risk stratification model in predicting fact of hospitalisation (AUC), number of hospitalisations/bed days (RMSE) and level of health expenditure (RMSE) (AUC-Area under the curve, RMSE-Root mean square error).				✓	
	1.04.03 Variation in predictive performance of risk stratification models across practice types/categories (reflecting quality of practice information).				✓	
	1.04.04 Improvement in predictive performance measures when adding additional data from linked source.				✓	
1.05 How effective and efficient were the program's administrative processes, including for patient enrolment, claims management, monitoring program processes, and managing program compliance and integrity?	1.05.01 Description of administrative arrangements for the trial.		✓			
	1.05.02 Proportion of HCH claims processed within specified timeframes.			✓		
	1.05.03 Proportion of practices agreeing that the HCH processes reduced administrative burden for the practice compared with usual MBS processes.			✓		
	1.05.04 Program and administrative improvements most frequently identified by practices and other stakeholders.					✓

Key question 1: Detailed questions	Key question 1: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
	1.05.05 Description of compliance issues that emerged during the trial and how these were addressed.			✓		
Level: Primary Health Network/Regional						
1.06 What roles did PHNs play in the HCH implementation? What existing PHN/ state/territory/ LHN quality improvement/ chronic disease management initiatives were leveraged to assist the HCH implementation?	1.06.01 Support activities most frequently identified by practices, PHNs and other stakeholders.		✓			
	1.06.02 Description of quality improvement/ chronic disease management initiatives by PHNs, LHNs, and state and territory health authorities leveraged during HCH implementation.		✓			
	1.06.03 Quality improvement/ chronic disease management initiatives most frequently identified by practices, PHNs and other stakeholders.		✓			
	1.06.04 Opportunities for improvement in support provided to practices by PHNs, LHNs, and state and territory health authorities most frequently identified by practices and PHNs.					✓

Key question 2: How does the HCH model change the way practices approach chronic disease management?

Key question 2 relates to the practice level of the logic model. High-risk patients with chronic disease are the target group for the HCH program, and consequently, change in chronic disease management is a principal focus. The evaluation needs to examine the changes that occurred within practices from prior to the implementation to the end of the trial. Detailed questions for key question 2 are shown Table 5, together with associated measures.

Although chronic disease management is central to the HCH program, the assessment of change within practices should be broader, given that the patient centred medical home model is a practice-wide initiative. The evaluation should assess the maturity of participating practices on dimensions of the patient centred medical home model at the commencement of the HCH program (recognising that practices may have already incorporated some practices aligned with a patient centred medical home approach), and how practices change on these dimensions by the end of the trial.

Prior to HCH, practices will have implemented various initiatives for improving chronic disease management (as this was one of the criteria for selecting them to participate in HCH). It will be important to understand these initiatives, and how practices have leveraged and enhanced these during the HCH implementation. Similarly, an understanding of existing quality improvement initiatives within the practices is required. These also often encompass the whole patient population rather than being limited to patients with chronic illnesses.

Table 5 – Detailed evaluation questions and measures relating to Key question 2

Key question 2: Detailed questions	Key question 2: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
Level: Practice						
2.01 What did practices do to implement HCH, and how did this differ between practices, including changes to policies, procedures, systems, administrative processes, changes to manage payment for HCH patients, processes for risk stratification, and patient enrolment?	2.01.01 Most frequent changes to policies, procedures and systems as a result of HCH implementation (together with descriptions).		✓			
	2.01.02 Proportion of practices that reported changes to administrative processes (grouped to categories) to manage payments as a result of HCH implementation (together with descriptions of processes).		✓			
	2.01.03 Proportion of practices that reported undertaking activities (grouped to categories) for risk stratification and patient enrolment processes (together with descriptions of processes).		✓			
2.02 How did practices approach provision of chronic disease care prior to the implementation of HCH? What chronic disease management and quality improvement initiatives were in place within the practice at the commencement of the HCH program? Which of these were used and/or enhanced for the HCH implementation?	2.02.01 Most frequent chronic disease management/quality improvement initiatives and processes that were a focus during the trial. Initiatives will be assigned to categories based on coding of textual descriptions.		✓			
	2.02.02 Proportion of practices that reported focussing on specific categories of chronic disease management/quality improvement initiatives.		✓			
2.03 How did the mix, roles and activities of primary health care staff change following the HCH program implementation?	2.03.01 Mean number of staff (head count and FTE) by staff type (GP, practice nurse/other nurse, nurse practitioner, allied health staff, Aboriginal Health Worker, administrative staff) at commencement and at the end of the trial.	✓				
	2.03.02 Proportion of practices that reported undertaking changes in staff roles (grouped to categories) following the HCH commencement (together with descriptions of changes).		✓			
	2.03.03 Proportion of practices that reported undertaking changes in staff activities (grouped to categories) following the HCH commencement (together with descriptions of changes).		✓			
2.04 How did the relationship between the practice and other health care and service providers change during the HCH implementation? Did the HCH program provide opportunities for	2.04.01 Most frequent changes in care coordination reported by external health service providers with which HCH practices interact (together with descriptions).		✓			

Key question 2: Detailed questions	Key question 2: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
better coordination of care, information sharing and communication with other health care and service providers?	2.04.02 Proportion of practices that reported changes in relationship between the practice and other health care and service providers (grouped to categories) following HCH commencement (together with descriptions of changes).				✓	
2.05 How did the additional flexibility associated with the bundled payment facilitate practice change? Was the value of the bundled payment sufficient to change the way practices provide chronic disease care?	2.05.01 Proportion of practices that reported undertaking specific changes (grouped to categories) due to the additional flexibility that the bundled payment provided for the practice (together with descriptions of processes).				✓	
2.06 How did practices change from prior to the HCH program implementation to the end of the trial in implementing the dimensions of the patient centred medical home?	2.06.01 Proportion of practices with improved overall score, scores on each dimension, and scores for individual items, on the HCH-A tool, from between HCH commencement and at the end of the trial. (Change in mean scores will also be analysed.) The following dimensions will be highlighted in the analysis: organised/evidence based care, continuous and team based healing relationships, patient centred interactions, and care coordination.				✓	
	2.06.02 Change between HCH program commencement and at the end of the trial in the proportion of practices by after-hours arrangement categories.				✓	
	2.06.03 Change between HCH program commencement and at the end of the trial, in practice operating hours by day of week and public holidays.				✓	
2.07 Which practice level approaches to implementation worked well, and in what contexts?	2.07.01 Rating of effectiveness of implementation strategies by practices (together with descriptions).				✓	
2.08 How did the impact of HCH vary across practices with different characteristics (e.g. across different remoteness areas and ownership arrangements)? How did these characteristics affect the success of the model? What does this tell us about the potential of the HCH program to improve access to primary health care, particularly for vulnerable and disadvantaged populations, and improve equity in health outcomes?	2.08.01 Proportion of patients enrolled in HCH by risk tier and other selected characteristics, compared across HCH practice strata.				✓	
	2.08.02 Patients enrolled in HCH as a proportion of the total practice population, compared across HCH practice strata.				✓	
	2.08.03 Multiple: Comparison of patient level outcomes, including access (see key question 3) compared across HCH practice strata and assessment of implications for equity in access and outcomes.				✓	✓
2.09 How did the HCH implementation change provider experiences of delivering primary care services?	2.09.01 Proportion of practice staff who report that following the HCH implementation they experienced improvements in selected aspects of their job, including: (a) having clear planned goals and objectives; (b) having an interesting job; (c)				✓	

Key question 2: Detailed questions	Key question 2: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
	developing their role; (d) working to the full scope of their practice; (e) having adequate resources to do their job.					
	2.09.02 Change in proportion of staff who left the service in the year prior to HCH vs. the final year of HCH.				✓	

Key question 3: Do patients enrolled in HCH experience better quality care?

Key question 3 relates to the patient level of the logic model. Detailed questions are shown Table 6, together with associated measures.

An objective of HCH is that:

> *People living with chronic and complex conditions, supported by their carers and families where appropriate, will be actively involved in planning and implementing their care. They will be engaged in shared decision-making and supported to stay healthy and to better self-manage their conditions.*

(Australian Government Department of Health, 2016, p 4)

This objective builds on the recommendations of the Primary Health Care Advisory Group, which emphasised the need to *activate* patients to be engaged in their care. The Review proposed that:

> *As part of care planning with the patient …, an assessment of the level of patient health literacy and their motivation for adopting healthier behaviours to support their care should be included. A patient activation measure or similar short survey would define the role of the patient in the care plan, including guiding patients to tools and information that can help them to know more about their health conditions and how to manage them.*

(Primary Health Care Advisory Group, 2015, p 22)

Therefore, following enrolment in the HCH program, patients, and their carers and families, will be engaged in developing a care plan (which may build on an existing care plan).

The evaluation should assess how the HCH implementation led to enhancements in the care planning and review processes and other patient-provider interactions, and the extent to which these led to greater levels of patient activation. Another aspect of this will be to consider the characteristics of patients for whom HCH will be most beneficial.

By changing the funding from fee-for-service to a bundled payment, the HCH program opens opportunities for new ways of interacting with patients. This flexibility supports one of the key attributes of the patient centred medical home model, which is to create new ways through which patients can gain access to primary care. The evaluation should examine how the mix of contacts between the patient and practice changed, including whether the alternative modalities were used by patients, and how this impacted the overall level of care accessed by patients.

Another intended change is that improved chronic disease management is provided for HCH patients.

Ideally the changes resulting from the HCH implementation will result in changes in the use of other health care services outside the practice. This includes the use of allied health, secondary care and hospital services. The long-term expectation is that the HCH model will lead to reduced inappropriate use of hospital services. While hospital use needs to be assessed in the trial, previous research suggests that reductions may not be observed within the time frame of two years. In addition, changes in the mix of secondary health care and hospital services accessed by HCH patients should be considered. Appropriate use of these

services implies both the reduction in unnecessary care, and identifying and addressing under-use.

The HCH model is expected to lead to an improved experience of care for patients, their carers and families. This includes the improved experience of primary care delivered by the HCH practice, and the experience of coordination of care with other providers. In the evaluation, changes in patient experience need to be assessed.

Medium- and long-term outcomes of the HCH program include improvements in health status (as evidenced by changes in clinical measures), key health events (such as the onset of acute conditions, exacerbations of chronic conditions, transition to residential care, and death), and other patient outcomes (including patient-reported outcomes). Previous research on the patient centred medical home model suggests that significant changes in these outcomes are unlikely to be observed in the time frame for the trial. However, these outcomes should be assessed in the evaluation where possible. As the HCH cohort includes patients whose chronic illnesses will be advanced, it is important to measure changes in outcomes by comparing HCH patients with a similar group of patients receiving primary care in practices that are not participating in HCH. Success in improved chronic disease management will be evidenced by demonstrating that the HCH model delays the progression of chronic disease, rather than preventing progression altogether.

Table 6 – Detailed evaluation questions and measures relating to Key question 3

Key question 3: Detailed questions	Key question 3: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
Level: Patient						
3.01 What changes occurred in the quality of chronic illness care provided for patients enrolled in the HCH program, and how did these compare with patients receiving care from practices not enrolled in HCH? Was there an improvement in the provision of preventive services (e.g. influenza vaccination). Was there an improvement in the level of medications review and quality use of medicines?	3.01.01 Change in the proportion of HCH patients with a diagnosis of Type 2 diabetes recorded in the practice system/inferred from other practice system data, for whom the results of a HbA1c test were recorded at least once in the previous six and in the previous 12 months compared with the change for comparator patients. (See Note 1) (See Note 2)			✓		
	3.01.02 Change in the proportion of HCH patients for whom a diagnosis of diabetes can be inferred from MBS/PBS claims, for whom a claim for a HbA1c test was made at least once in the previous six and in the previous 12 months compared with the change for comparator patients. (See Note 2)			✓		
	3.01.03 Change in the proportion of HCH patients for whom the results of a blood pressure assessment were recorded at least once in the previous six and in the previous 12 months compared with the change for comparator patients. (See Note 2) Patients with a diagnosis of Type 2 diabetes will be analysed separately. (See Note 1)			✓		
	3.01.04 Change in the proportion of HCH patients or whom the results of a lipid test were recorded in the practice system at least once in the previous six and in the previous 12 months compared with the change for comparator patients. (See Note 1) (See Note 2)			✓		
	3.01.05 Change in the proportion of HCH patients with a diagnosis of Type 2 diabetes and patients who had a cardiovascular disease diagnosis recorded in the practice system/inferred from other practice system data, for whom the results of a kidney function test (estimated glomerular filtration rate (eGFR) and/ or an albumin/creatinine ratio (ACR) or other micro albumin test result) was recorded at least once in the previous 12 months compared with the change for comparator patients. (See Note 1) (See Note 2)			✓		
	3.01.06 Change in the proportion of HCH patients for whom a claim for a lipid test was made at least once in the previous 12 months compared with the change for comparator patients. (See Note 1) (See Note 2)			✓		

Key question 3: Detailed questions	Key question 3: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
	3.01.06a Change in the proportion of HCH patients whose smoking status has been recorded. (See Note 1) (See Note 2)			✓		
	3.01.06b Change in the proportion of HCH patients for whom information has been recorded in the practice clinical management system to enable calculation of BMI. (See Note 1) (See Note 2)			✓		
	3.01.06c Change in the proportion of HCH patients who are immunised against influenza. (See Note 1) (See Note 2)			✓		
	3.01.06d Change in the proportion of HCH patients who have had the necessary risk factors assessed to enable cardiovascular disease assessment (including age, smoking status, cholesterol and blood pressure). (See Note 1) (See Note 2)			✓		
	3.01.07 Change in the proportion of patients for whom a claim for a GP management plan or review (MBS items 721) was made in the previous 24 months (with additional analysis conducted on previous 12 months), compared with the change for comparator patients. Note: HCH patients will not be eligible to claim item 721. However, the development of a GP management care plan is a requirement for enrolment in HCH. Therefore, it can be assumed that 100% of HCH patients have a GP management plan prepared. (See also Note 1 and Note 2) Additional analysis will be conducted to assess trends for Reviews of a GP Management Plan (Item 732) and contribution to a Multidisciplinary Care Plan, or to a Review of a Multidisciplinary Care Plan (item 729), and Health Assessment for Aboriginal and Torres Strait Islander People (MBS item 715).			✓		
	3.01.08 Change in the proportion of patients for whom a claim for the development of Team Care Arrangement (TCA) service (MBS item 723) was made in the previous 24 months (with additional analysis conducted on previous 12 months), compared with the change for comparator patients. Note: HCH patients' eligibility for item 721 for services delivered by the HCH practice will change, therefore assessment of these changes will require analysis and modelling based on practice data extracts. (See also Note 1 and Note 2).			✓		

Key question 3: Detailed questions	Key question 3: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
	3.01.09 Change in the proportion of patients who can be classified as meeting the criteria for psychotropic polypharmacy, polypharmacy or hyperpolypharmacy compared with the change for comparator patients. (See Note 2) Psychotropic polypharmacy is defined as two or more psychotropic medicines 'taken' at the same time. Polypharmacy is defined to five to 10 medicines 'taken' at the same time. Hyperpolypharmacy is defined as 10 or more medicines 'taken' at the same time.				✓	
	3.01.10 Change in the proportion of patients who can be classified as meeting the criteria for psychotropic polypharmacy, polypharmacy or hyperpolypharmacy for whom a medication review claim was made in the previous 12 months compared with the change for comparator patients. (See Note 2) See definitions above.				✓	
	3.01.11 Change in the proportion of patients who exceed thresholds for potential inappropriate drug use (based on Beers criteria (American Geriatrics Society Beers Criteria Update Expert Panel, 2015) and/or Drug Burden Index (Hilmer, Mager, Simonsick et al., 2007)) compared with the change for comparator patients. (See Note 2)				✓	
3.02 Did patients enrolled in the HCH program have improved access to primary care services, including through alternate ways of accessing the service? How did the use of primary care services change for HCH patients compared with similar patients receiving care from practices not enrolled in HCH? How did use of services from within the HCH practice change? Did the HCH model result in increased continuity in the provision of primary care?	3.02.01 Proportion of patients who increased their assessment of access to care items on the patient survey (aggregated across dimensions and individual item scores) between baseline and final patient survey. (Change in mean scores will also be analysed.)				✓	
	3.02.02 Most frequent improvements in access to care reported by consumers, families and carers (together with descriptions).				✓	
	3.02.03 Change in the mean number of services for which unreferred MBS claims have been made in the previous 12 months compared with the change for comparator patients. (See Note 2) (Note: for HCH patients, levels of service will be estimated by using practice data extracts to identify equivalent services claimable under MBS.)				✓	
	3.02.04 Change in the proportion of primary care services delivered across modalities (face-to-face, telemedicine, email) and staff type (GP, practice nurse, nurse				✓	

Key question 3: Detailed questions	Key question 3: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
	practitioner, allied health, Aboriginal Health Worker) in the previous 12 months between: (a) entry to the HCH program; and (b) the anniversary of entry to the program.					
	3.02.05 Change in non-referred services delivered by HCH practices as a proportion of all primary care providers. (An additional formulation of this measure will include emergency department presentations in the numerator of total non-referred services.)				✓	
	3.02.06 Change in indices of care continuity and care density for the previous 12 months compared with the change for comparator patients. (Note for HCH patients, levels of service will be estimated by using practice data extracts to identify equivalent services claimable under MBS.) Indices include: usual provider of care (UPC) index (Saultz, 2003), Bice Boxerman Continuity of Care (COC) index (Bice and Boxerman, 1977), and Care Density Index (Pollack, Weissman, Lemke et al., 2013). (See Note 2)				✓	
3.03 How did the use of secondary care and other community-based services change for HCH patients compared with similar patients in practices not enrolled in HCH? Was there improved coordination of services between primary care and other service providers?	3.03.01 Change in the mean number of claims for allied health services available under MBS for people with chronic diseases (MBS Items 10950-10970;81100-81125) in the previous 12 months compared with the change for comparator patients. (See Note 2)				✓	
	3.03.02 Change in the mean number of specialist, pathology and imaging services for which MBS claims have been made in in the previous 12 months compared with the change for comparator patients. (See Note 2) (Note for HCH patients, levels of service will be estimated by using practice data extracts to identify equivalent services claimable under MBS.)				✓	
	3.03.03 Most frequent changes in referral pathways and improvements in integration of care reported by practices, PHNs and other stakeholders (together with descriptions).				✓	
3.04 Were the patients enrolled in the HCH program and their families/ carers more engaged in managing patients' health needs? What strategies resulted in the greatest impact on patient activation?	3.04.01 Proportion of patients with improved assessment of engagement, including increased involvement in care planning (aggregated across dimension and individual item scores) and activation between baseline and final survey. (Change in mean scores will also be assessed).				✓	

Key question 3: Detailed questions	Key question 3: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
	3.04.02 Most frequent changes in patient engagement and activation reported by patients (together with descriptions).				✓	
3.05 Did patients enrolled in the HCH program report an improved experience of primary care, including coordination of their care and communication with their primary care providers? What were the experiences of patients, carers and families in care planning?	3.05.01 Proportion of patients with an improved rating of their primary care provider between the baseline and final patient survey. (Change in mean scores will also be assessed.)				✓	
	3.05.02 Proportion of patients with an improved assessment of the communication items (aggregated across dimension and individual item scores) between the baseline and final patient survey. (Change in mean scores will also be assessed.)				✓	
	3.05.03 Proportion of patients with an improved assessment of the coordination of care items (aggregated across dimension and individual item scores) between the baseline and final patient survey. (Change in mean scores will also be assessed.)				✓	
	3.05.04 Most frequent improvements in communication and coordination of care reported by consumers, families and carers (together with descriptions).				✓	
3.06 How did the utilisation of hospital services (including emergency care), and entry into aged care change for HCH patients compared with similar patients receiving care in practices not enrolled in HCH?	3.06.01 Change in the mean number of emergency department presentations (total and by episode end status) per patient in the previous 12 months compared with the change for comparator patients. (See Note 2)					✓
	3.06.02 Change in the mean number of emergency admitted patient care episodes per patient in the previous 12 months compared with the change for comparator patients. (See Note 2)					✓
	3.06.03 Change in the mean number of total admitted patient care episodes per patient and bed days per patient in the previous 12 months compared with the change for comparator patients. (See Note 2)					✓
	3.06.04 Change in the mean number of total admitted patient care readmissions per patient in the previous 12 months compared with the change for comparator patients. (See Note 2)					✓

Key question 3: Detailed questions	Key question 3: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
	3.06.05 Change in the proportion of acute bed days occurring in a hospital that is located close to the patient's residence.					✓
	3.06.06 Change in the mean number of potentially preventable admitted patient care episodes (overall and by type) per patient in the previous 12 months compared with the change for comparator patients. (See Note 2)					✓
	3.06.07 Change in the mean number of potentially preventable admitted patient care bed days (overall and by type) per patient in the previous 12 months compared with the change for comparator patients. (See Note 2)					✓
	3.06.08 Change in the mean National Weighted Activity Units (NWAU) (admitted and emergency care) per patient in the previous 12 months compared with the change for comparator patients. (See Note 2)					✓
	3.06.09 Proportion of patients admitted to a residential aged care facility compared with proportion for comparator patients.					✓
	3.06.10 Mean/ median time for HCH patients admitted to a residential aged care facility compared with the mean/ median time for comparator patients (using time-to-event analysis).					✓
3.07 Which patients benefited from the HCH program? Are the benefits of the HCH program similar for patients across categories of disadvantage? Was patient participation in the program maintained through the trial? Were movements of patients between risk tiers appropriate? What does this tell us about the potential of the HCH program to improve access to primary health care, particularly for vulnerable and disadvantaged populations, and improved equity in health outcomes?	3.07.01 Multiple: Comparison of patient level outcomes (each of the indicators) compared across selected patient characteristics including: remoteness area of residence, Indigenous status, selected cultural and linguistic diversity (CALD) categories, categories of risk, including assessment of implications for equity in access and outcomes.				✓	✓
	3.07.02 Proportion of patients who leave the program categorised by reason for leaving.				✓	
3.08 What preliminary evidence is there of the impact of the HCH program on health outcomes?	3.08.01 Change in the proportion of HCH patients with a diagnosis of Type 2 diabetes recorded in the practice system/inferred from other practice system data, whose last HbA1c measurement result was within specified levels (less than or equal to 7%; greater than 7% but less than or equal to 8%; greater than 8% but less than 10%; greater than or equal to 10%), compared with the change for comparator patients. (See Note 1) (See Note 2)					✓

Key question 3: Detailed questions	Key question 3: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
	3.08.02 Change in the proportion of HCH patients with a diagnosis of Type 2 diabetes or cardiovascular disease recorded in the practice system/inferred from other practice system data, who had a kidney function test within the last 12 months and an eGFR result recorded, with results within specified levels (greater than or equal to 90; greater than or equal to 60 but less than 90; greater than or equal to 45 but less than 60; greater than or equal to 30 but less than 45; greater than or equal to 15 but less than 30; less than 15), compared with the change for comparator patients. (See Note 1) (See Note 2)					✓
	3.08.03 Change in the proportion of HCH patients with a diagnosis of Type 2 diabetes recorded in the practice system/inferred from other practice system data, whose last blood pressure measurement result was less than or equal to 130/80 mmHg, compared with the change for comparator patients. (See Note 1) (See Note 2)					✓
	3.08.04 Median time to event reflecting onset of serious acute cardiovascular event or death. Composite index of hospital admission for selected serious conditions (e.g. acute coronary syndrome, stroke) and death. Median time to event for HCH patients compared with comparator patients (using survival analysis).					✓
	3.08.05 Median survival (time to death). HCH patients compared with comparator patients (using survival analysis).					✓

Note 1: These measures are currently part of the National Key Performance Indicators (nKPIs) for Indigenous specific primary healthcare organisations.
Note 2: Analysis of trends based on measures calculated at each six-month interval from the date of enrolment in HCH.

Key question 4: What are the financial effects of the HCH model on governments, providers and individuals?

The final question requires consideration of the financial impact of the HCH model. This includes the impact on patients, on HCH practices, on changes in the use of primary and secondary services outside the HCH practice, and the impact of changes in the use of acute health care services. Detailed question for key question 4 are shown Table 7, together with associated measures.

Table 7 – Detailed evaluation questions and measures relating to Key question 4

Key question 4: Detailed questions	Key question 4: Measures	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
Level: Program						
4.01 What is the cost to governments of care for HCH enrolled patients?	4.01.01 Difference in mean government payments in the previous 12 months between (a) entry to the HCH program; and (b) the anniversary of entry to the program, HCH patients vs. comparator patients.		✓			
4.02 What is the cost to governments of care for HCH enrolled patients taking into consideration the net of savings due to reduced hospitalisation and other health services?	4.02.01 Difference in mean per patient total of government MBS/HCH payments and cost to government of hospital services in the previous 12 months between: (a) entry to the HCH program; and (b) the anniversary of entry to the program, HCH patients vs. comparator patients. Cost to government of hospital services will be based on the total NWAUs related to use of public hospitals, multiplied by the National Efficient Price.		✓			
4.03 Is the current HCH model financially sustainable?	4.03.01 Mean government cost (including of hospital services) per patient is less for HCH patients vs. comparator patients.		✓			
4.04 What resources are required to make HCH succeed, and how can these be efficiently used?	4.04.01 Estimated cost of improvements to the design and payment arrangements for the HCH model and the impacts these will have on program outcomes.		✓			
4.05 What will be the financial impact of extending the model to practices across Australia?	4.05.01 Estimated cost to government of extending the HCH to all other practices across Australia.	✓				
4.06 Does the HCH program deliver value for money?	4.06.01 Cost consequence analysis: Mean government cost per patient is less for HCH patients vs. comparator patients and there is evidence that HCH delivers equivalent or superior outcomes for patients. Alternatively, mean government cost per patient is greater for HCH patients vs. comparator patients and there is evidence that HCH delivers superior outcomes for patients.		✓			
Level: Practice						
4.07 What are the costs to practices of delivering HCH programs? Is this matched by HCH payments? Is the current HCH model financially sustainable for practices?	4.07.01 Per patient practice revenue for HCH patients compared with continuation of usual MBS payments.		✓			
	4.07.02 Change in net cost to practices per patient resulting from changes in the mix of services delivered to HCH patients.		✓			
Level: Patient						
4.08 What is the impact of HCH enrolment on patient, carer and family out-of-pocket costs?	4.08.01 Difference in the mean out-of-pocket payments for HCH patients in the previous 12 months between: (a) entry to the HCH program; and (b) the anniversary of entry to the program, HCH patients vs. comparator patients. Out-of-pocket costs will be estimated from MBS and PBS data, analysis of hospital data and analysis and modelling of practice policies relating to co-payments for HCH patients.		✓			

Key questions 5 to 8: Evaluation questions for the community pharmacy component of the HCH trial

Questions 5 to 8 relate to the community pharmacy component of the HCH trial. Table 8 shows these along with associated measures.

Table 8 – Detailed questions for the evaluation of the community pharmacy component of the HCH trial

Measures	Level PR=Program PH/C= Pharmacist/ practice PT=Patient	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
Key question 5: Is community pharmacy a beneficial component of the broader HCH coordinated care model and should it be included as part of any future roll out?						
5.01 Description of program activities undertaken.	PR		✓			
5.02 How did pharmacists prepare for delivering medication management services to patients?	PH/C		✓			
5.03 Number of pharmacists completing the online training and attending the training workshops.	PR					
5.04 Pharmacists' satisfaction with online training and training workshops.	PR		✓			
5.05 Nature of pharmacy integration initiatives, including related to medication reconciliation/ review, that HCH practices and community pharmacists had in place prior to the commencement of the community pharmacy component of the HCH trial.	PH/C					
5.06 What features of the program worked and what features need to be improved?	PR				✓	
5.07 Number and proportion of HCH patients (by tier) receiving Trial Program services and comparison with HCH population.	PR			✓		
5.08 Distribution of patients across self-reported chronic conditions, and comparison with HCH population.	PH/C			✓		
5.09 Distribution of patients across practice types and geographic regions, and comparison with HCH population.	PR			✓		
5.10 Number and proportion of patients that completed follow-up reviews.	PT			✓		
5.11 How adequate was the number of sessions for patients' needs?	PT				✓	
5.12 Number and proportion of Tier 2 and Tier 3 patients receiving supporting services.	PT			✓		
5.13 Types of supporting services provided by pharmacists to Tier 2 and 3 patients and changes at follow-up review.	PH/C			✓		
5.14 Under what circumstances do Tier 1 patients benefit from supporting services?	PT				✓	
5.15 Was patient participation in the program maintained throughout the trial?	PT			✓		
5.16 What were the types of goals identified for patients during the development of the MMP? Which were the most common?	PH/C		✓			

Measures	Level PR=Program PH/C= Pharmacist/ practice PT=Patient	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
5.17 What were the type of outcomes reported in patients' MMPs? Which were the most common?	PH/C			✓		
5.18 Which patients benefited from the Trial Program and how did they benefit?	PT				✓	
5.19 Are the benefits of the program similar for patients across categories of disadvantage? What strategies are required to ensure disadvantaged groups benefit from the program?	PT				✓	
5.20 How were medications reviewed for patients who did not receive services from community pharmacists?	PT				✓	
5.21 Opportunities for improving program-level activities in subsequent rollouts of the program most frequently identified by stakeholders.	PR					✓
Key question 6: Do patients who received medication management services as part of the HCH trial experience better health outcomes than patients who did not?						
6.01 What criteria did practices use to select patients who could benefit from community pharmacist input?	PH/C		✓			
6.02 Change in patients' self-reported (to the pharmacist) attendance at an emergency department and/ or hospitalisation in the last 6 months – initial assessment compared with follow-up review.	PT				✓	
6.03 Change in MedsIndex score - initial assessment compared with follow-up review.	PT				✓	
6.04 Change in patients' adherence to medication (pharmacists' assessment) - initial assessment compared with follow-up review.	PT				✓	
6.05 Change in the proportion of patients who can be classified as meeting the criteria for psychotropic polypharmacy[1], polypharmacy[1] or hyperpolypharmacy[1] - initial assessment compared with follow-up review.	PT				✓	
6.06 Change in pharmacist's observation of the patient's achievement of each of the agreed medication management goals at the follow up review.	PT				✓	
6.07 Patients' assessment of community pharmacy service in gaining knowledge, improving confidence and competence with medications.	PT				✓	
6.08 Themes identified in qualitative analysis of reports from patients, carers and families on their experiences in receiving the services of the community pharmacist.	PT				✓	
6.09 Did patients referred to community pharmacists report an improved experience of care overall, including coordination of their care and communication with their HCH?	PT				✓	

Measures	Level PR=Program PH/C= Pharmacist/ practice PT=Patient	Inputs	Activities	Outputs	Outcomes ST	Outcomes MT
Key question 7: What was the level of engagement between HCH practices and community pharmacy (care coordination)?						
7.01 Number of pharmacists verbally consulting HCH/ GP about the patient, participating in team care meetings/ case conferences with patients' HCH, or advising the HCH/ GP of issues through other communication.	PH/C			✓		
7.02 What approaches were implemented to facilitate collaboration between pharmacists and HCH practices/ GPs?	PH/C		✓			
7.03 How successful were these models from the perspective of pharmacists and HCH practices/GPs? What factors contributed to or detracted from successful collaboration? What needs to change to improve the level of interprofessional collaboration between pharmacists and HCH practices/GPs?	PH/C				✓	
Key question 8: Is the inclusion of a pharmacy component in HCH financially viable?						
8.01 What is the cost of the community pharmacy component of the HCH trial?	PR					✓
8.02 Do the fees paid to pharmacists compensate for the time spent with HCH patients during the trial?	PH/C					
8.03 What is the evidence that the program will lead to cost savings through quality use of medicines?	PR					

[1] *Psychotropic polypharmacy is defined as two or more psychotropic medicines 'taken' at the same time. Polypharmacy is defined to five to 10 medicines 'taken' at the same time. Hyperpolypharmacy is defined as 10 or more medicines 'taken' at the same time.*

Evaluation design

4

Overview

Two approaches will be taken to estimate the impact of the HCH program:

- Analysis involving comparison groups. For example, where changes in measures related to patients enrolled in HCH are compared with similar patients receiving care in practices not enrolled in HCH. Similarly, changes in practices participating in HCH compared with similar practices not participating in the program.
- Analysis that tracks changes prior to and following the implementation HCH, and the changes that occur for patients and practices as a result of HCH.

The analysis will need to identify dimensions across which practices vary, and to allocate practices to categories that are important in considering the further rollout of the program (e.g. location, size, organisational ownership and aspects of organisational 'maturity').

The following sections provide further descriptions of the approaches to conducting the comparative analysis and the before-and-after analysis.

Qualitative data collected will provide an opportunity to explore in-depth outcomes that may not be easily measured through quantitative means, and describe the factors that contributed to or impacted the observed changes.

Table 9 sets out the data collection approaches/ sources that will be used. In the 'Comparator group' column, 'No' means that the data will only relate to the practices or patients enrolled in HCH. 'Yes' means that it is intended that data will be extracted and analysed for both the practices or patients enrolled in HCH as well as other (matched) practices and patients not participating in HCH. The Table also lists the rounds during which the data collection will occur.

Primary data collection will be in relation to the practices and enrolees within those practices, except for the case studies, which will be undertaken in a subset of practices (approximately 20). The secondary data will be for all practices as well as comparator practices and patients.

Table 9 – Evaluation data sources/ approaches

Data source	Collection type	Comparison group	Coverage of pharmacy component	Data collection periods
Patient* surveys	Primary	No	Yes	Rounds 1, 4, 5
Practice surveys	Primary	No	No	Rounds 1, 2, 4, 5
Practice staff surveys	Primary	No	Yes**	Rounds 1, 5
PHN surveys	Primary	No	No	Rounds 1, 4, 5
Case studies • Patient* interviews/ focus groups • Practice interviews • Related provider interviews (e.g. pharmacists, allied health) • PHN interviews • Local Hospital Networks (LHNs)/ state & territory health authority interviews	Primary	No	Yes	Rounds 2, 4, 5
HCH program data***	Secondary	No	Yes	Jul 2017-Jun 2021
Risk stratification data	Secondary	Yes	No	Jul 2017-Jun 2021
Practice extracts	Secondary	Yes	No	Jul 2017-Jun 2021
Linked data: • Medical Benefits Schedule (MBS) • Pharmaceutical Benefits Schedule (PBS) • National hospital morbidity data - hospital separations • National non-admitted patient emergency department care data - emergency department presentations • National aged care data – residential aged care admissions, community aged care packages • Fact of death	Secondary	Yes	No	Jul 2015-Jun 2021

** For simplicity, the term 'patient' has been used in this document to refer to data collection relating to HCH enrolees, but also refers to carers and/ or family members of enrolled patients; ** GP survey only; *** Includes data used to manage the program, including from the Department of Human Services and the Community Pharmacy Health Outcomes Data.*

Comparative effectiveness

The evaluation will be based on a quasi-experimental design in which selected outcomes for an intervention group (patients enrolled in HCH) will be compared with outcomes of comparison group(s) (equivalent patients receiving care in practices not participating in HCH). The unit of observation for the intervention and comparison groups will be the patient.

There is the possibility that there will be more than one comparison group. This depends on the availability of data on comparisons and ethical approval to link data related to comparison groups. The Department of Health is creating a data set linking MBS, PBS, hospital separations and emergency department attendances, which is one of the key sources of data for HCH enrolees and comparison patients.

Extracts of data from general practice systems will also be obtained, leveraging arrangements currently in place. As practice data will not be linked with MBS and PBS data, two comparison groups will be required: one for the MBS and PBS data, and one for the

practice data. For both, identification of matched comparisons will be required, but the criteria for this is likely to vary between groups.

Intervention and comparison patients will be selected using a propensity scoring approach, which considers: age, sex, Indigenous status, remoteness or area of residence, PHN and risk strata/ score. Risk strata/ scores will be derived by applying a risk stratification system that can be equally applied to intervention and comparison groups. This will not be the same as the risk stratification system used in the enrolment process for HCH, as not all the input data for this system will be available for comparison patients. Instead, a model using PBS data, and diagnoses recorded for patients in hospitalisation data, will be used. Matching criteria will be applied reflecting data at the time of enrolment into HCH by the intervention group, based on point-in-time factors (e.g. age) and analysis of the prior two years of data (i.e. risk profile). A proxy enrolment point will be identified for comparison patients.

Patients are clustered into general practices and other primary health care services. For the intervention group, information on clustering will be available to the evaluators. This may be the case for patients within the comparison group, but is not yet confirmed. It may be possible to apply proxy measures to estimate clustering within practices in the comparison group. If information is available on the practices of patients from the comparison groups, then practices will be matched as a first step in selecting comparisons, and then patients drawn from within those practices.

For the intervention and comparison groups, core measures will be derived for a period preceding the implementation of HCH, and during the trial.

Patients will be progressively enrolled in HCH during the first 21 months of the rollout of the program (October 2017-June 2019). For comparison purposes, observations will be subset into two periods: the two years preceding enrolment (i.e. as far back as 1 July 2015 and up to and including June 2019) and up to two years following enrolment. The maximum follow-up period with be three years and 9 months (i.e. patients enrolled in October 2017), and the minimum 24 months (patients enrolled in the program up during June 2019).

The effect of HCH will be estimated by comparing differences in the values of measures for the intervention and comparison groups between the 27-29 months prior to enrolment/ proxy enrolment, each six-month period following enrolment, and the full post enrolment period (up to three years and 9 months). Adjustments will be made to take account of variation within the intervention and comparator groups in the number of months observed.

The characteristics to be evaluated of the intervention and comparison groups are summarised in Table 10.

Table 10 – Summary of intervention and comparison groups

Characteristics	Intervention	Comparison
Practices	200 practices/ services selected to participate in HCH.	Comparison practices to be selected.
Practice populations	High-risk patients identified through risk stratification.	
Patients enrolled in HCH	Selected high-risk patients enrolled in HCH.	
Patients who agree to participate in the HCH evaluation	HCH enrolees will be included in the evaluation unless they opt out. It is expected that some will opt out.	A matched set of comparison patients based on analysis of available data (national linked data).
Observation periods	Two years prior to enrolment.	Two years prior to proxy enrolment date.
	Each six-month period post enrolment.	Each six-month period post proxy enrolment.
	Up to three years and 9 months post enrolment.	Up to three years and 9 months post proxy enrolment.

As discussed, the effects that can be estimated using the design described above will be limited to those for which measures can be derived for both the intervention and comparison groups. These will be largely limited to measures related to key questions 3 (some of which include the impact on health outcomes) and 4. The intended approach to these is described in Table 11 below.

Table 11 – Key questions to be evaluated through comparative effectiveness analysis

Key question	Description of approach

Key question 3: Do patients enrolled in HCH experience better quality care?	Measures of changes in clinical processes associated with the implementation of HCH. This will include measures of the provision of preventive services and the provision of appropriate care consistent with clinical guidelines for management of chronic conditions.
	
	Various aspects of health outcomes can be estimated using routine data sources. These include estimates of:
	
	• mortality
	• progression of disease based on hospitalisation data and pharmaceutical data (using population risk stratification tools)
	• admission to residential care.
	
	Key question 3 also seeks to determine whether patients enrolled in HCH have different patterns of service use. This will be addressed through analysis of differences in service use between the intervention and comparison groups. This analysis can be conducted for sub-categories of services, including:
	
	• primary care
	• secondary (specialist care attendance)
	• pharmaceutical use (PBS related only)
	• emergency department presentations
	• hospital admissions, including:
	  ○ total admissions, bed days, and weighted admissions
	  ○ emergency admissions and weighted admissions

Key question	Description of approach
	○ potentially avoidable admissions, bed days, and weighted admissions ○ admissions related to the chronic diseases identified in data sources, bed days, and weighted admissions.
Key question 4: What are the financial effects of the HCH model on governments, providers and individuals?	Analysis of difference in costs between intervention and comparison groups, from the perspective of government, providers and patients. Costs will be modelled using data on service use. Costs of implementation and ongoing management of HCH will be captured from Department of Health data, and interviews with practices and PHNs. The potential to use practice data extracts to estimate the use of services provided by the HCH practice for which no MBS payment has been made will be explored. If not, these data will be sought through other avenues (e.g. a survey of practices for a sample of patients). The data will be used to estimate the difference between actual revenue from the HCH payment and the MBS revenue a practice would achieve outside the model, to determine the financial impact on the practice. Data from practices will be obtained to estimate the additional costs of new initiatives within the practice that have occurred as a result of the HCH implementation. Cost minimisation/ effectiveness analysis will be undertaken using modelling based on these data. Modelling will be undertaken to estimate the cost to government of further rollout of HCH.

Before- and-after and cross-sectional analyses

In addition to estimating effects of the HCH for a set of outcomes, the evaluation will collect data from the HCH practices and patients for which no comparisons will be available. The absence of a comparison group limits the capacity to draw conclusions about whether any changes observed within the practices and/ or patients are an improvement on usual care, or may have occurred in the absence of the HCH intervention.

Some analyses will be cross-sectional, for example, comparing the practices that have been recruited into the HCH program with the full population of practices. These analyses will be important in considering the applicability of the evidence generated from the evaluation to the full population of practices.

The key questions to be addressed through these additional components of the evaluation, and the approach to addressing these through before-and-after analysis and qualitative analysis, are described in Table 12.

Table 12 – Key questions to be evaluated through before- and-after and cross-sectional analyses

Key question	Description of approach
Key question 1: How was the HCH model implemented and what were the barriers and enablers?	Analysis of quantitative and qualitative information on how the program was implemented, with a focus on identifying enablers and barriers that could be enhanced or addressed in subsequent stages of the implementation of HCH. This will include analysis of aspects of the enrolment process (e.g. how well the risk stratification process worked, proportions of patients willing to be enrolled in the program), effectiveness and utility of training provided, and PHN support to practices.
Key question 2: How does the HCH model change the way practices approach chronic disease management?	Some aspects of this question will also be addressed from the analysis described under Key question 1. Quantitative and qualitative data obtained from practices on structural and process attributes at the commencement of the HCH implementation and following implementation (12- and 24-month time points). This will include for example, changes in recording key clinical measures, such as blood pressure. Quantitative and qualitative data from practices on the processes of implementation of changes prompted by HCH. Primary care clinicians and other staff quantitative and qualitative assessments of the experience of delivering care as a HCH, at selected points post implementation.
Key question 3: Do patients enrolled in HCH experience better quality care?	Patient assessment of key dimensions of quality of care and care coordination at the time of enrolment to HCH and at selected points post enrolment. Measures of change in clinical processes associated with the implementation of HCH, including measures of preventive services and of appropriate care consistent with clinical guidelines for the management of chronic conditions.

Primary data collection 5

The groups from which primary data will be collected and the approaches are shown in Table 13.

Table 13 – Primary data collection approaches

Group	Data collection approach and evaluation round	
	Survey	Interviews/ focus groups
Patients*	Rounds 1, 4, 5	Rounds 2, 4, 5
Practices	Rounds 1, 2, 4, 5	Rounds 2, 4, 5
Practice staff	Rounds 1, 5	Rounds 2, 4, 5
PHNs	Rounds 1, 4, 5	Rounds 2, 4, 5
Related providers		Rounds 2, 4, 5
Local Hospital Networks (LHNs)/ state & territory health authorities		Rounds 2, 4, 5

** Includes carers and/ or family members of enrolled patients.*

Note that in addition to practice surveys and practice staff surveys, practice level data will be sourced from:

- Data extracts from practices (see *Chapter 6 Secondary data sources*). These will be used to build an understanding of the practice population and the patients enrolled in HCH.
- Program information. Includes data to manage the program, such as from the Department of Human Services.
- PHNs. Information about local initiatives/ programs that practices participate in may also be available from PHNs in addition to obtaining it from practices.

For community pharmacies, the Community Pharmacy Health Outcomes Data will be used to supplement information obtained from surveys and interviews.

The collection approaches are described below.

Practice survey

All participating HCH practices will be invited to participate in the practice survey. The practice survey is expected to be coordinated by a nominated person within the practice (such as a practice manager), but will need to seek input from GPs, practice nurses, nurse practitioners and other practice staff.

The practice survey is at Appendix C. In summary, it will collect information on:

- practice and organisational details
- staffing configuration
- access arrangements (opening hours, after-hours arrangements)
- information systems and uses
- assessment of risk stratification and enrolment processes
- shared care planning
- patient engagement and activation
- chronic disease management
- initiatives implemented/ enhances as part of HCH

- assessment of training and support
- financial impacts of HCH.

Where relevant, changes to the above will be captured in each survey round.

In addition, a key objective of the practice level data collection will be to assess the extent to which a practice displays the elements of a HCH, and the strength of those elements. The tool that will be used to allocate practices to categories that reflect the level of maturity of HCH elements is the Health Care Homes Assessment (HCH-A), a tool adopted for use in Australia by WentWest in 2015, and further adapted by AGPAL in 2017 for the HCH implementation in Australia (MacColl Center for Health Care Innovation at Group Health Research Institute, Qualis Health, WentWest et al., 2017). This is a self-assessment tool intended to be completed by practices to assess their status as a HCH, and track their progress against the domains of the patient centred medical home model. The tool has been embedded in the practice survey at Appendix C.

Practice staff surveys

Practice staff surveys will be administered at two time points: Round 1 and Round 5. The practice staff survey is at Appendix D. It is largely based on the Medical Home Care Coordination Survey (Zlateva, Anderson, Coman et al., 2015), and will collect staff perspectives on:

- **HCH processes: care planning and review, multidisciplinary/ interdisciplinary team care,** for example, changes to team collaboration within the practice, changes to care coordination. The Round 5 GP survey will specifically include questions on how GPs and pharmacists work together.
- **HCH processes: chronic disease management,** for example, patient communication and engagement.
- **HCH overall impact,** for example, staff experience/ assessment of the impact of the HCH program on the quality of care delivered to patients and their outcomes.
- **Training,** for example, staff experience/ assessment of the utility of training provided as a part of the HCH implementation.
- **Provider experience,** for example, staff satisfaction and impact of HCH on role.

Some of the data above will also be collected through the practice survey (e.g. through the HCH-A tool). The responses from individual staff members will assist with interpreting and moderating the responses submitted by the practice.

Case studies

Case studies will be undertaken in 10-12 locations/ communities, and depending on the proximity of practices within these locations, will involve about 20 practices. The aim of the case studies is to provide more comprehensive information for the evaluation about what happened with the implementation in the selected locations, from various perspectives. They will provide an opportunity to explore in detail the experience of patients and GPs, primary care staff and other stakeholders.

The case studies will involve two to three-day intensive site visits, engaging various groups as follows:

- patient (including carer and/ or family) interviews and focus groups, and where appropriate, interviews with community members
- practice and practice staff interviews
- allied health/community pharmacy and other service provider focus groups (in a subset of the 10-12 locations)
- PHN interviews
- LHN and state/territory health authority interviews.

Preparation for the site visits will include:

- review of all data about that practice(s)
- development, in close collaboration with the PHN and/ or practice(s), of appropriate processes to identify potential interviewees and invite them to participate
- construction of a draft site visit plan, including interview times, places and participants.

In locations involving ACCHSs, preparation for site visits will require extensive liaison with the local community prior to the visit.

Within each case study, efforts will be made to ensure views and experiences are elicited from a wide range of participants that reflect the patient population and staffing of the practices, with the aim of maximising variability in the sample.

Practice interviews

Interviews with practices will provide a means of exploring features and impacts of the HCH implementation that are not easily captured in a more structured way. A topic guide (i.e. broad outline of the topics to be covered) for the practice interviews is at Appendix G. The key areas for discussion are:

- The nature of changes that have occurred within practices associated with HCH.
- Shared care plans/ planning process.
- Any initiatives involving pharmacists preceding HCH and experiences with referring patients to community pharmacists following the implementation of the community pharmacy component of the trial.
- Movement towards intended outcomes, including impact of HCH initiatives on patients.
- Impact of the HCH implementation on practice staff.
- Unintended impacts/ outcomes of the implementation.
- Factors that have assisted the implementation, and factors that have been challenging.
- Contextual factors/ parallel internal and external initiative.

Interviews may be held one-on-one with GPs, practice managers, practice nurses and other practice staff, or with a group of these staff. The topic guide reflects issues relevant to the round of data collection. Interviews in Round 2 will explore the nature of changes implemented in the practice, and factors that assisted or impacted implementation. Interviews in rounds 4 and 5 will assess the impact of the changes, the factors that impacted success, and the features of the program that may require modification.

Focus group with related providers

To supplement the information received from practices, focus groups with providers that HCH practices refer to or receives referrals from, will be held. It is anticipated that this will mostly be allied health providers and community pharmacists. The focus groups will occur in a small subset of the practices that will be interviewed in-depth. Information about related providers will be sought from the practices participating in the case studies, and PHNs.

The purpose of the focus group will be to ascertain the experiences of coordination of care of patients from the perspectives of these other providers. Community pharmacists will also be asked about their experiences with the community pharmacy component of the HCH trial.

Topic guides for related provider interviews are at Appendix G.

PHN surveys and interviews

PHNs are playing an active role in the HCH implementation. This role includes assisting practices in implementation (e.g. enrolling patients and training practice staff). The PHN survey will capture these activities and inputs to the program. The PHN survey is at Appendix E. Key questions include:

- the nature of training provided to practices
- the nature of support provided for enrolling patients
- nature of other PHN initiatives impacting HCH practices
- PHN resources involved in support and training of HCH practices
- PHN assessment of factors impacting the implementation of HCH within practices (enablers and barriers)
- PHN assessment of the impact of HCH amongst practices.

Representatives from PHNs will also be interviewed. These interviews will provide a mechanism to further explore the issues associated with the implementation and success of HCH across practices within the PHN, and to identify opportunities for improving the program's design. The topic guide for the interviews is at Appendix G, including discussion on the following:

- enablers and barriers for PHNs
- enablers and barriers for practices, including in relation to the community pharmacy component
- views on features of practices successfully implementing HCH
- contextual information/ factors.

Local Hospital Network (LHN) and state/ territory health authority interviews

With each round of practice interviews, representative of LHNs aligned with the regions in which HCH is implemented and health authorities within each state and territory will also be interviewed. These interviews will provide a mechanism to identify and explore initiatives being implemented by LHNs and/ or state and territory health authorities that impacted on HCH practices, including those undertaken as part of the bilateral agreements. The topic guide for LHN and state/ territory health authority interviews is at Appendix G. Also, the LHNs are likely to be more closely involved in the implementation of HCH amongst practices within their regions, and thus have views on enablers and barriers for practices in implementing HCH, and features associated with successful implementation. They will also be asked about these.

Patient surveys and interviews

Surveys are intended to be of patients enrolled in HCH, but in some instances, may be completed by a proxy on behalf of the patient (e.g. carer, family member). A question in the survey will be whether the patient had assistance in completing the survey, and the level of this assistance.

Interviews are also intended, to obtain experiences of enrolled patients, but will also seek the views of carers and/ or families as a proxy for the patient, as well as independent of the patients (but focusing on the care delivered to patients).

For simplicity, the term 'patient' has been used in this document to refer to data collection relating to HCH enrolees, but as explained above, may also refer to carers and/ or family members of enrolled patients.

Only patients enrolled in HCH will be invited to participate in a survey and/ or an interview or focus group. No comparisons are intended.

There will be three administration points for the surveys (Round 1, Round 4 and Round 5). Changes will be measured at the patient level (i.e. a repeated measures design), but can only be assessed between these time points (i.e. there will be no data preceding the initial interview).

A sample of patients will be surveyed (with a target of 2,000 responses), drawn from practices participating in HCH but excluding the NT Aboriginal Community Controlled Health Services (ACCHSs). The sample will include patients from all HCH Tiers drawn from an online database established for the evaluation: HCH practices enter enrolees' demographic and contact details into the database upon enrolment.

To ensure that there is an adequate sample of patients participating in the community pharmacy component, in rounds 4 and 5 (i.e. following the implementation of the community pharmacy component in August 2018), the target responses will be expanded to 2,500, with the additional 500 drawn from those referred to community pharmacists.

The instrument to be used for the patient surveys is at Appendix F. It uses items from the following sources:

- Patient Assessment of Chronic Illness Care (13-item version) (Gibbons, Small, Rick et al., 2017)
- Patient Activation Measure (PAM) (13-item version) (Hibbard, Mahoney, Stockard et al., 2005)
- EQ-5D-5L health status measure (Herdman, Gudex, Lloyd et al., 2011)
- Consumer Assessment of Healthcare Providers and Systems (CAHPS) Clinician and Group adult survey (CG-CAHPS) (Agency for Healthcare Research and Quality, 2015)
- Care Coordination Quality Measure for Primary Care (CCQM-PC) (Agency for Healthcare Research and Quality, 2016).

The questions relating to the community pharmacy component were adapted from Moon et al. (2016).

Surveys will be conducted via computer assisted telephone interviewing (CATI).

Patient interviews and focus groups will be used to gain further insight into patients' experience of care, including their perceptions of their engagement in care. There will be three points for interviews and focus groups (rounds 2, 4 and 5). Patients interviewed in Round 2 will be followed up in round 4 and 5 to obtain repeated measures.

The topic guide for the patient interviews and focus groups is at Appendix G. Discussion will include:

- factors leading to decision to enrol in HCH
- expectations of HCH and whether experience aligns with these
- care processes
- awareness of and involvement in shared care plan
- experience with mediations, and for patients referred to a community pharmacists, their experiences of this
- what works, and what doesn't.

6 Secondary data sources

Secondary sources of data that will be used for the evaluation are as follows:

- HCH program data. Information on the HCH program will be sought from the Department of Health (e.g. program documents, applications of enrolled practices, Commonwealth expenditure on the Program) and the Department of Human Services.
- Risk stratification data. This is the data output from the risk stratification tool that practices apply to select patients to approach to enrol in HCH.
- Practice clinical management system extracts.
- Linked MBS, PBS, National death index, National hospital morbidity database (NHMD), National non-admitted patient emergency department care database (NAPEDCD) data, and the National Aged Care Data Clearinghouse (NACDC) for HCH practices and comparator group/s, referred to as 'National linked data extract'.

The last three sources are described below.

Practice extracts

Extracts from practices clinical management systems will be used to:

- Evaluate the risk stratification process (completeness of predictive risk model items, proportion of high-risk patients enrolling in HCH).
- Compare HCH patients with comparator patients, including demographic composition, health status, risk factors, service use, prescription medicine use, and pathology tests.
- Compare the management of HCH patients to comparator patients.
- Describe changes in management of HCH patients following the implementation of HCH.

Practice extracts will be obtained directly from practices, using software designed for this purpose.

Linked data and components

To enable the evaluation to respond to questions relating to outcomes of patients following the implementation of HCH, data from various national sources needs to be linked. These sources include:

- MBS
- PBS
- Fact of death

- National death index
- National hospital morbidity database (NHMD)
- National non-admitted patient emergency department care database (NAPEDCD)
- Aged care.

Medical Benefits Schedule (MBS) and Pharmaceutical Benefits Scheme (PBS) claims data

MBS claims are for subsidised medical and diagnostic services provided by registered medical and other practitioners. Specific services are coded using a system of Item Numbers listed in the MBS. For each claim, MBS data include the date of the service, the Item Number(s), patient age, gender and postcode, provider business code, the amount charged by the provider, the Medicare benefit for the service, the method of payment and information relating to the provider. Individual providers who practice in more than one location have multiple Medicare provider numbers.

PBS claims are for prescribed medicines dispensed in the community setting (i.e. excluding medicine prescribed to patients while admitted to a public hospital). PBS data include PBS Item Number, date, type of prescription, PBS payment category, speciality of provider and pharmacist's business postcode. Various measure of pharmacy use, including polypharmacy and hyperpolypharmacy and appropriateness of use of medicines will be explored using this data.

National death index

The National death index is compiled by the AIHW and contains records of all deaths registered in Australia. Data come from Registrars of Births, Deaths and Marriages in each jurisdiction, the National Coronial Information System and the Australian Bureau of Statistics. Data items include date of death, and underlying and contributing causes of death, coded according to the International Statistical Classification of Diseases and Related Problems (ICD-10). There is a lag in the supply of cause of death data (e.g. as at September 2016, the AIHW had access to cause of death data for deaths registered up to and including the 2014 calendar year). Therefore, cause of death data for HCH participants may not be available during the timeframe for evaluation. Nonetheless, approvals for linkage of National death index data will be sought to facilitate ongoing evaluation of the HCH rollout.

National hospital morbidity database (NHMD)

The NHMD is compiled by the AIHW from data supplied by the state and territory health authorities. It is a collection of electronic summary records for separations (discharges, transfers and deaths) from public and private hospitals in Australia. Almost all hospitals in Australia are included in the database: public acute and public psychiatric hospitals, private acute and psychiatric hospitals, and private free-standing day hospital facilities. The information reported includes:

- patient demographics
- source of referral to the service
- service referred to on separation
- length of stay
- diagnoses, procedures, and external causes of injury, coded according to the International Statistical Classification of Diseases and Related Problems, 10th Revision, Australian Modification (ICD-10-AM)

- Australian Refined Diagnosis Related Groups (AR-DRGs), which group patients into resource homogenous classes using diagnoses and/ or procedures and other characteristics of the hospital stay (e.g. same day versus longer stay), and allow the calculation of a National Weighted Activity Unit (NWAU), which in turn is associated with a measure if resource use when the National Efficient Price is applied.

There is a lag in the availability of NHMD data of at least one year. Therefore, unless the timeliness of the data improves, post-enrolment NHMD data for HCH participants will be limited. Nevertheless, the availability of these data is important for evaluating subsequent rollouts of the Program, and thus the infrastructure for accessing it needs to be established.

National non-admitted patient emergency department care database (NAPEDCD)

The NAPEDCD is compiled by the AIHW from data supplied by the state and territory health authorities. It is a collection of electronic summary records for presentations to public hospital emergency departments. The data include records for non-admitted patients registered for care in emergency departments in selected public hospitals that are classified as either peer group A or B (Principal referral and specialist women's and children's hospitals or Large hospitals) from all Australian jurisdictions, as well as data for smaller hospitals from some jurisdictions. The proportion of public hospital emergency departments covered by the NAPEDCD is estimated to be about 85%. The information reported includes:

- patient demographics
- mode of arrival
- urgency (triage) category
- episode end status (i.e. admitted to hospital or discharged home)
- diagnosis (which may be coded using ICD-10-AM or earlier revisions, or the Systematized Nomenclature of Medicine - Clinical Terms - Australian version [SNOMED-CT-AU])
- Urgency Related Groups, which group patients into resource homogenous classes using diagnosis, urgency and episode end status, and also allow the calculation of a NWAU and application of the National Efficient Price.

Emergency department diagnoses will not be investigated, as the multiple coding systems used by departments/ states make this an insurmountable task within the scope of this project.

There is a lag in the availability of NAPEDCD data of about four months. As with the NHMD, unless the timeliness of the data improves, post-enrolment NAPEDCD data for HCH participants will be limited.

National Aged Care Data Clearinghouse (NACDC)

The National Aged Care Data Clearinghouse (NACDC) is a central, independent repository of national aged care data, managed by the AIHW. It coordinates data collection from various agencies and departments and creates data sets from the information that is collected. The type of information captured includes:

- people in aged care (as obtained from assessment records), such as by age, sex and marital status
- type of aged care service received, and care needs and conditions that affect care needs (such as those recorded in the ACFI), where applicable

- admissions and separations, by aged care service type.

For the evaluation of the HCH program, data from the NACDC will be used to:

- Populate measures relating to time to entry to residential care for HCH patients, compared with matched patients.
- Understand other related services that HCH patients are receiving, for example, home care packages. This will provide contextual information for interpretation of measures, and the capacity to control for these factors when comparing measures.

The data are refreshed annually to include the previous financial year ending in June (the refresh fully replaces historical data, where applicable). There is also a time lag of this data of up to a year.

Economic analysis

7

The economic analysis will seek to answer key question 4: What are the financial effects of the HCH program on governments, providers and individuals? Specific questions that have been articulated in relation to this key question are as follows:

- What is the cost to governments of care for HCH enrolled patients?
- What is the impact of HCH enrolment on patient out-of-pocket costs?
- What is the cost to governments of care for HCH enrolled patients, net of savings due to reduced hospitalisation and other health services?
- Does the HCH program deliver value for money?
- What are the costs to providers of delivering HCH programs?
- Is the current financial model sustainable?

The approaches to answering these are outlined below.

Cost to governments of care for enrolled patients

The cost of care for enrolled patients includes the HCH capitation payment, additional MBS Items claimed, PBS items claimed, the costs of any hospitalisations, emergency department presentations, outpatient visits, and community health services. Under the Australian healthcare system, services are paid for by a range of sources, including state and federal governments payments, direct payments made by patients, and private health insurance. The evaluation will examine costs from a range of perspectives. A sub-group analysis will then determine the cost implications for both federal and state governments. This type of analysis is essential to understand the sustainability and ultimately the scalability of the initiative. In particular, it will be able to identify the potential financial winners and losers of the initiative. Data for this part of the analysis will be extracted from administrative claims data, where available (i.e. data on state government costs will be limited to hospitalisations and emergency department presentations, and will not include outpatient or community health services).

Impact of HCH enrolment on patient out-of-pocket costs

Providers can charge co-payments for services provided under HCH. Therefore, this component of the economic analysis is to confirm whether HCH practices changed the way they charge patients for HCH care plans and other services. It should be noted that co-payments for HCH plans could replace co-payments on other service use and therefore have no net effect on patient costs. There may also be an impact on health insurance claims if some allied health services (e.g. physiotherapy, dietary advice) are substituted by services funded by Medicare. Therefore, it is important to understand the change in charging and referral practices. This information will be obtained from practice interviews, patient surveys and administrative data.

Net cost to governments

The net costs to governments requires quantification of the difference in costs and cost savings of healthcare use for patients enrolled in HCH from what they would have cost under the conventional payment model. A critical aspect of this component of the economic analysis is the identification of an appropriate comparison group for enrolled HCH patients. This will draw on the analysis of comparative effectiveness.

Differences in the use of primary care and hospital resources associated with HCH enrolment will be assessed by obtaining administrative data on the identified comparison group(s). Even with the establishment of an appropriate comparison group, adjusting for risk categories and other demographic factors will mean that advanced quantitative methods will need to be employed in the assessment of the impact of HCH on the use of resources and the cost of care of enrolled patients. Quantitative methods will need to be used in this component of the economic analysis to control for measurement issues related to the simultaneous determination of the cost of care and morbidity-based risk indicators. Examples of the methodologies that will be used to disentangle these complexities include treatment-effects estimation for observational data, panel data techniques, difference-in-difference models, nearest-neighbour matching methods, sample-selection models and endogenous switching regression models.

Note that while the economic evaluation will assess whether increased primary care use has been offset by fewer hospital admissions, it is believed that such an offset will be limited due to the short period that HCH will have been implemented. This is consistent with previous assessments of coordinated care programs. Controlling for the risk profile of patients may show differences in resource use at early stages of HCH. Nevertheless, advanced quantitative methods will be used to explore the complexities involved in the use of healthcare resources and to extrapolate potential effects beyond the early stages of implementation of HCH.

Value for money

An economic evaluation involves the comparison of costs and benefits with and without an intervention. In healthcare evaluation, there are numerous options available and the final choice in analytical technique depends on the data available for the intervention and comparison groups as well as the anticipated impacts of the intervention on health outcomes. For this project, a cost minimisation analysis and a series of cost consequence analyses are deemed to be the most appropriate.

Cost minimisation compares the net costs of a new intervention with conventional care, assuming that the benefits of the new intervention are at least equal to those of the alternative. This is likely to be the case, and will be confirmed by the comparative effectiveness component of the evaluation. Further, any major cost savings realised are likely to be due to reduced hospitalisation. Reduced hospitalisation also captures improvements in health status.

There are likely to be a range of benefits which result from HCH for patients which may be demonstrated in improvements in care coordination, care quality and satisfaction. For this reason, the cost-minimisation analysis will be supplemented by a series of cost consequence

analyses which will present the incremental costs of HCH (if positive) against a series of other measures.

Costs to providers of delivering HCH

The practices delivering HCH will also face costs. There will be costs of establishing the new program, including the costs of participating in education and training, and setting up IT for patient identification and management. There will be ongoing costs of service provision such as the employment of additional practice nurses or care coordinators. These will be identified and quantified based on information obtained from practices.

This component of the analysis will also address the issue of sustainability from the general practice perspective by considering the impact on the total operating costs and revenue of the practice. The economic evaluation will assess the changes in revenue and costs that occur to ensure that the funding model is appropriate and can be sustained. This is an essential part of the economic analysis, as it will provide policy guidance on likely success of HCH from a business model perspective.

Sustainability of the funding models

The economic analysis will conclude with an assessment of how the funding arrangements align the financial incentives with the intended program outcomes. This analysis will test the robustness of the funding model to further stages of implementation, including changes to financial risks that are borne by governments, practices and patients under HCH. The first stage implementation is limited to selected practices within 10 specified PHNs. It should be expected that there will be a strong volunteer effect and that broader rollout may induce gaming or other strategies which lead to undesirable consequences. Options to be explored include:

- Modelling alternative patient risk profiles and identifying their potential impact on costs, outcomes and patient selection.
- Modelling alternative payment levels and their likely impact on cost, outcomes, patient practice selection.
- Modelling alternative HCH specifications that may include changing the number of services that are included in the payment.
- Analysing the effects of alternative practice business models.

8 Analysis plan

Quantitative data analysis

Quantitative data analysis will use several statistical software packages, including SAS, MLWin and R.

As an initial step, a set of programs will be developed to manage data flows from the various sources. The programs will include data quality checks, descriptive analysis, and data manipulation to organise the data in a structure that is appropriate for modelling. Programs will be established to produce descriptive statistics which can be available in several formats (html, pdf). These descriptive statistics will be interactive, allowing users to investigate a range of issues.

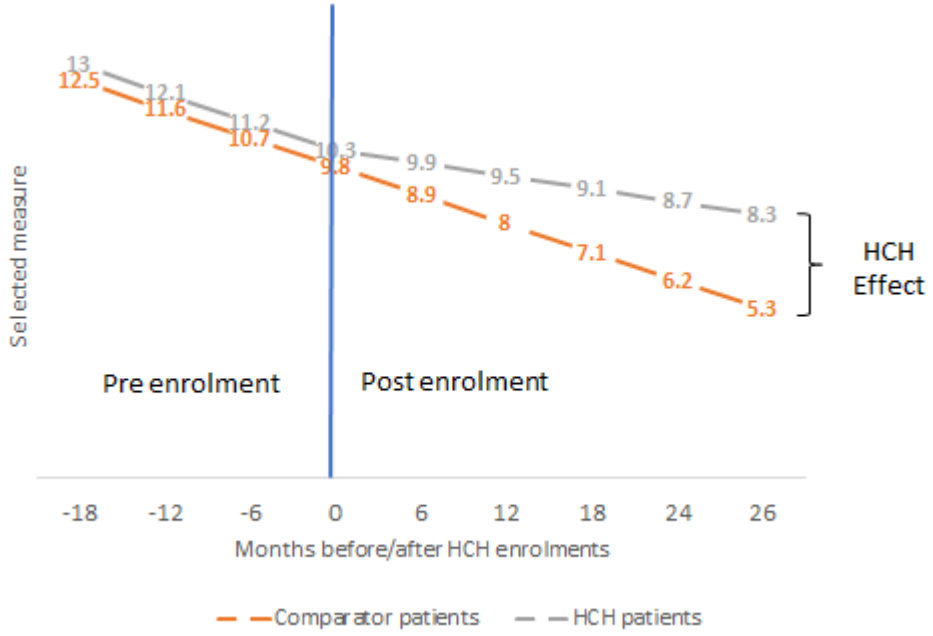
Comparative analysis

The statistical modelling approaches will generally be conducted within a multilevel (random effects) model framework to account for the repeated measurements on individuals and the clustering of individuals within general practices. All models will adjust for potentially confounding variables at the patient level which have not been adequately addressed through the matching of HCH and comparator patients. These confounding variables may include: demographic and socioeconomic factors (age, sex, country of birth, Indigenous status, remoteness of patient residence, private health insurance and health care card holder status) and measures of baseline patient characteristics reflecting levels of risk, based on analysis of available data (which include: health service use, pharmacy use, diagnoses in the two-year period prior to baseline).

Underlying statistical models will reflect the nature of the measures, for example logistic (proportions), Poisson or negative binomial (for measures reflecting counts/rates) or gamma (for measures of costs).

In many of the analyses the objective will be to identify differences in trends for HCH patients compared with comparator patients. Measures will be assessed at six-monthly intervals within the two years prior to HCH enrolment, and at each six-month interval following enrolment. Figure 3 illustrates the analysis approach for a hypothetical measure. In this instance, there is a long term downward trend for both HCH and comparator patients for this measure. The aim of analysis is to detect a change in this trend for HCH patient following the HCH implementation. This change may be reflected in a once-off change to the level observed for HCH patients and/or a change in the slope of the trend.

Figure 3 – Illustration of comparative analysis strategy



Comparison cohorts will be established to address several of detailed questions specified for key questions 2 and 3. Two comparison cohorts will be created, one based on data from national sources (MBS, PBS, hospital data), and the second based on data from practice extracts.

Survival analysis will be used for measures related to time-to-event, including comparisons of median time-to-event for each of the comparison groups. Time-to-event data, such as time-to-death or time-to-first hospital admission, will be analysed using Cox Proportional Hazard models fitted within a multilevel modelling framework (i.e. with a frailty term). For mortality, the outcome will be whether the patient died and the time variable will be calculated as the number of days from the start of the intervention to the date of death for those who died, or from the start of the intervention to the end of the follow-up period for those who are still alive. For non-fatal outcomes, the time variable will be calculated as the number of days from the start of the intervention to the date of the outcome of interest for those who had an event, or from the start of the intervention to the end of the follow-up period or date of death, whichever comes first, for patients who did not have an event of interest. For the comparator cohort, the start date will be the start of the intervention from the matched intervention patient.

Before-and-after analysis

For measures in which data will be available only for HCH patients or practices, analysis approaches will compare trends or point in time prior to and after implementation/enrolment in the HCH program. For example, patient surveys will collect data on patients' experience. The survey data will be collected at two time points. The baseline survey will be conducted shortly after the patient is enrolled in HCH, and the follow-up surveys will be conducted close to the end of the trial.

The analysis of these outcomes will use all the data that are available at the time, and will be conducted using an appropriate regression model (linear, logistic, Poisson or negative

binomial, gamma) fitted within a multilevel modelling framework. The model will include random effects for patients and practices, with patients nested within practices.

Other analyses

Mediation analysis

Using data derived from the surveys of staff and patients at the practices, scores will be derived that reflect the extent to which a patient's care has been changed in accordance with the HCH intervention. Using these scores, a mediation analysis will be undertaken to determine if patients with higher scores are the ones who tend to have the most improvement in the outcomes. Similarly, a separate mediation analysis will be undertaken at the level of the practice to determine if the patients at the practices that score higher on implementation have better outcomes than practices that score lower after adjusting for pre-intervention levels.

Benchmarking reports

Benchmarking reports for HCH practices will be made available to individual practices via a secure web portal. PHNs will receive aggregated benchmark reports for the practices in their region. The reports will include a selection of the evaluation measures with the results for each practice compared with those of similar practices and all practices. These reports will be provided about once every six months once access to data is obtained.

Validation of the risk stratification tool

The risk stratification tool will be validated by analysing the risk scores allocated to patients (and the risk strata) at the point of entry to the program and the outcome on which the models were initially developed, that is, hospitalisation in the next 12 months. The validation will focus on two aspects:

- How well the risk stratification models/process identifies patients who were subsequently hospitalised, through analysis of Area Under the Curve (AUC) and associated c-statistic. (Supplementary analysis will group patients into 10 groups of equal size using the risk score and testing the relationship between the risk score and the proportion of patients hospitalised (using the Hosmer-Lemeshow test).)

- The extent to which the level of information available for risk stratification (largely from practice data extracts) impacted the predictive performance of the risk stratification tools. To achieve this, the impact of adding information that subsequently becomes available to the evaluation (from PBS data and hospitalisation data) on predictive performance (measured in terms of the AUC and c-statistic) will be analysed.

Additional analyses will examine the predictive performance of risk stratification score/risk strata for alternative outcome measures including primary health care costs/use, secondary care costs/ use and total hospitalisation costs/ use. The predictive performance of models extended to include additional information from other sources will also be tested using these alternative outcomes.

Imputation of missing data

It is almost certain that data extracted from practice systems will not be complete, and the missing data may impact analyses. Therefore, all the analyses outlined above which involve the use of practice data will initially be undertaken using all the available data. However,

sensitivity analyses will be conducted by completing the data using the multiple imputation by chained equations (MICE) approach. MICE is an imputation process that can handle different types of variables, and is implemented by fitting a series of regressions to the data, where each variable is regressed on all the other variables being considered. This process is done iteratively until it converges.

Modelling economic aspects of HCH

In addition to the analyses described above, several models will be developed to allow analyses of aspects to the HCH program, including the implications of extending implementation more broadly across primary care in Australia. Parameters for these models will address issues such as:

- Changes to eligibility criteria for enrolment.
- Changes to payment levels and associate risk strata.
- Number of practices recruited to the HCH program by type of practice.

The model will be used to estimate the impact of these changes on:

- Numbers of patients enrolled.
- Costs to government (including Commonwealth and hospital related expenditures), practices and patients.
- Selected benefits for patients.

Qualitative data analysis

Qualitative data will be collected through interviews, focus groups and qualitative responses to surveys. Program documents will also contain qualitative data.

Interviews and focus groups will be audio recorded (with the permission of each participant), and subsequently transcribed. Each transcription will form a document that is imported into qualitative analysis software (MaxQDA). Each document will be categorised to reflect the type of participant, the period at which the interview occurred (e.g. baseline), and the practice/location to which the interview relates. These categorical descriptors will be used in the analysis of responses. Qualitative responses to practice and PHN surveys, and program documents, will also be imported into the software. These data will include a range of attributes of each practice/PHN.

Interviews, transcripts, qualitative survey responses, and documents, will be coded to flag key themes. The coding scheme is expected to evolve as the analysis progresses. These can be cross-tabulated against the characteristics of the participants (e.g. general practitioner, nurse). The thematic analysis will be written up by members of the evaluation team, and shared between members and enhanced through discussion.

The analysis will seek to identify the key issues related to implementing the model, classifying these against the attributes of interviewees (and the point in time at which interviews are conducted) and sources of the qualitative data.

9 Data quality control

This Chapter describes procedures for managing data quality control of primary and secondary sources used for the evaluation and the resulting analyses undertaken using these data.

Primary data – surveys

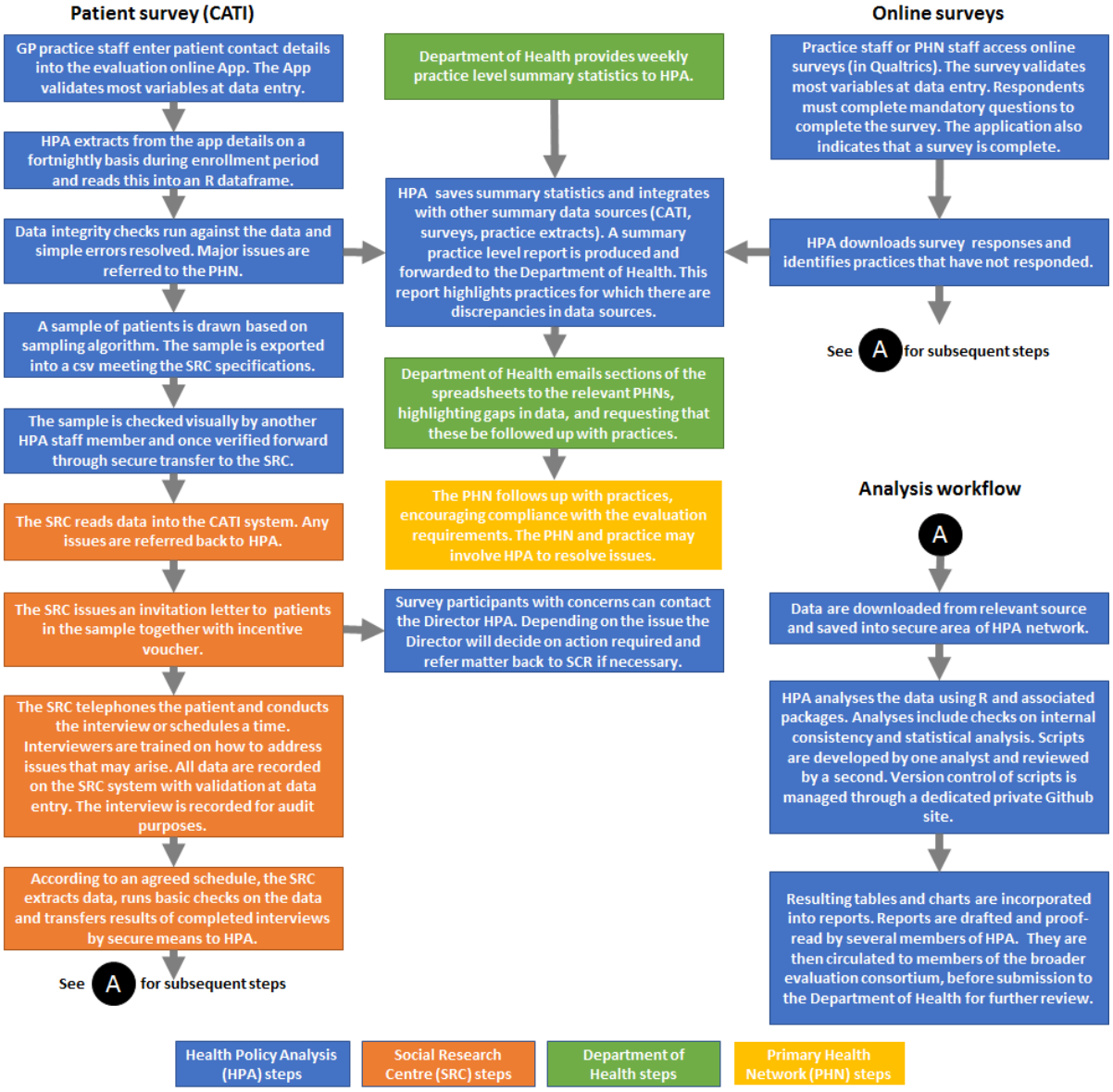
Table 14 describes the processes that have been established for managing data quality for surveys conducted for the evaluation. Figure 4 provides an outline of the process flows for the surveys and specific steps and roles for managing issues data integrity and quality issues.

Table 14 – Description of processes used to manage data quality issues of primary data sources
CATI=Computer assisted telephone interview, HPA=Health Policy Analysis, SRC=The Social Research Centre, CBDRH=Centre for Big Data in Health research, PHN=Primary Health Network.

Data quality issue	Processes to manage issue
Compliance of practices in providing patient contact details for CATI surveys	• Prepare guides for practices for the evaluation, including 'quick guides' and webinars, available on the HCH evaluation website. PHN practice facilitators can use these in education activities with practices. • Send letters to all participating practices from the evaluation Director to each practice contact describing the components of the evaluation, their purpose and how to find further information. • At the release of each online practice/practice staff survey, upload link onto the evaluation app together with the due date. Notify PHNs of the release and the due date through the Department of Health (meetings and regular correspondence). PHNs instructed to contact practices to notify them of the surveys. • Monitor practice compliance with surveys through fortnightly practice-level summary reports, forwarded to each PHN (for their practices only) through the Department of Health. Reports to show: alignment between the patient details recorded in the evaluation app and the Department's records of the number of enrolled patients, receipt of practice extract data, HCH patients flagged in the extract data, responses received to the evaluation surveys. The Department to regularly ask PHNs to follow up issues identified in these reports with practices. In some circumstances the Department, on advice from HPA, to follow up issues directly with a PHN where this is considered necessary.
Compliance of practices and individual staff in responding to surveys	
Compliance of practices in supplying extracts from clinical management systems and flagging HCH patients in these extracts	
Compliance of PHNs in responding to surveys	• Inform PHNs at the commencement of the evaluation about the survey requirements and timing in each round. • Notify PHNs when an online survey has been released and its due date—through the Department of Health. PHNs to contact HPA if they expect a delay. HPA to monitor responses and contact PHNs that have not responded to surveys on the agreed dates.
Response rates by patients to the CATI survey	• HPA and SRC to adopt evidence-based approaches for maximizing responses to these surveys (Dillman, Smyth and Christian, 2014): a personal letter, a non-contingent incentive, methods for patients to schedule interviews, at least three follow-up calls. For hearing impaired patients, use an alternative administration method (online survey).
Responses to CATI survey are valid	• SRC to use software that ensures responses recorded by interviewers are valid. Conduct a pilot survey to test time taken to complete the survey and whether ambiguities in any questions/combinations of responses not immediately apparent.

Data quality issue	Processes to manage issue
	Modify the survey following the pilot. Questions in the CATI survey to be based on validated instruments that have been widely used for evaluation – the Patient Assessment of Chronic Illness Care (13-item version) (Gibbons et al., 2017), the Patient Activation Measure (PAM) (13-item version) (Hibbard et al., 2005) and the EQ-5D-5L health status measure (Herdman et al., 2011). Other items proposed have also been validated or tested, including items from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Clinician and Group adult survey (CG-CAHPS) (Agency for Healthcare Research and Quality, 2015) and the Care Coordination Quality Measure for Primary Care (CCQM-PC) (Agency for Healthcare Research and Quality, 2016).
Responses to online surveys are valid	• Application used for the conduct of online surveys (Qualtrics) to ensure that responses to all closed questions are valid. Responses to open questions in the surveys to be coded into categories agreed by HPA staff responsible for qualitative analysis. A second analyst to check responses coded by a primary analyst. Source data retained to allow checking of codes assigned.
Management of data from surveys	• Data to be retained in the source systems. When downloaded, data to be saved into a designated secure area of the HPA network. Original data to be saved with the date in the name of the file. Later versions also saved with the date that is current at the time of saving.
Reproducibility of analysis	• Analysis to be conducted in R and associated packages. • A system for version control (a private GitHub account) to be applied to the scripts used to process and analyse data. • The scripts to involve a workflow from the source data through to the final outputs of analysis. This will allow for analyses to be reproduced.
Validity of analysis	• Analysis scripts to be developed by one analyst and reviewed by another. • Analysis to commence with exploratory methods including: frequencies of responses and cross tabulations and correlations between variables. Evaluation measures and covariates to be calculated where required. Measures also summarized at the practice level. A set of practice characteristics to be derived from these data. • Once an exploratory analysis stage has been completed, the analyst to move to relevant statistical analyses, including estimating models of the relationships between variables of interest (including outcome measures) and relevant predictors. Data from these sources to be analysed according to the evaluation plan. • Resulting tables and charts to be incorporated into reports. Reports drafted and proof-read by several members of HPA and circulated to members of the broader evaluation consortium before submission in draft form to the Department of Health, where they will be further reviewed.
Meta-data	• A spreadsheet describing all source data files arising from primary data collection processes to be developed and updated as the evaluation progresses. The spreadsheet to provide variable names, descriptions of the variable, valid values and labels for valid values. • An additional spreadsheet also been developed that specifies how key evaluation measures are calculated.

Figure 4 – Processes for managing integrity and quality if primary data sources: surveys



Primary data – interviews

For the evaluations, particularly the case study component, interviews will be conducted for patients, practice staff, PHN staff and other informants. With the permission of the interviewees, each interview will be recorded using a mobile device. The recording will be saved to a secure online site and then deleted from the mobile device. Interviews will be transcribed by a transcription service. The original transcript will be saved to a secure area of the HPA network. The transcript will then then edited by a HPA staff member to remove any identifying information. The edited transcripts will then imported into the qualitative data analysis software package MaxQDA. HPA analysts will then code and analyses the transcripts. In these processes it will be possible to trace back to the original recording if this is necessary.

Secondary data

Secondary data for the evaluation involve a range of data sources, namely extracts from the practice clinical information systems, extracts from the Department of Human Services' HCH enrolment database (HPOS), and MBS, PBS records linked to hospital admissions. Secondary data will be delivered into the SURE facility via the curated gateway. Personnel authorised to access each data source will be responsible for the upload of the data while the delegated curators (based at HPA and CBDRH) will be responsible for reviewing and approving the uploaded files. These procedures below address three quality control areas, following the delivery of data into the SURE facility.

Data storage and standardisation

Within the SURE facility, the approved files will be saved in designated folders which are set as read-only to prevent accidental deletion or overwrite of the original contents. Data will be delivered in different forms (e.g. CVS, text, SAS files) at different times. To standardise data for analysis, all the data files will be converted to SAS datasets. When it is necessary, information from different tables will be merged together and data fields will be transposed (e.g. information in the rows to be presented in the columns). Documentation of data delivered (e.g. dates of delivery, number of files delivered) and data preparation (e.g. SAS codes for format conversion, variable transpose, number of files created) will be maintained.

Data review, logical checks and verification

This procedure is comprised of a series of activities to ensure that data to be used for the evaluation are of highest quality. The data exploratory analysis enables a comprehensive understanding of the data and their quality in order to inform the main data analyses and interpretation of results. All the data files will be reviewed to make sure that all requested information was delivered, including data dictionaries. Any missing information will be discussed with data custodians or data providers for supplementation.

For practice extracts, confirmation will be sought from data custodians about how to identify patients who are enrolled in the HCH program. Subsequently, the distribution of key information such as the number of practices, number of patients, availability of data type (demographic, observations, medications, encounter, pathology, etc), socio-demographic characteristics and patient morbidity measures will be examined, using frequency, cross-tabulation, and visualisation. Unusual patterns of the data, for example, absence of data for a time period, absence of data from a practice, and a sudden change in trend will be discussed with the relevant data custodian for verification and advice for appropriate solutions. For linked MBS, PBS and hospital admission records, consistency of person-level content data (e.g. age, sex, dates of service utilisation vs date of death) will be examined to identify potential data errors. Biologically implausible errors might suggest false links and will be excluded from data analyses.

In addition, meetings and consultations with data custodians will be arranged to gain in-depth understanding about the context of the data (e.g. how data are generated in the first place, how they are extracted and processed prior to delivery, lessons learnt from prior work). When necessary, advice will be sought from data custodians and colleagues with expertise about whether the intended use of the information reflects what it means and how it is collected. The processes and results of data checking and consultations will be documented.

Analysing, presentation and interpretation of results

Data will be analysed in accordance with the framework of research questions set out in the evaluation plan. The methods that are scientifically appropriate for the research questions being addressed will be thoroughly developed and valid statistical analytic techniques will be adopted. Reliability and validity of the derived measures of evaluation outcomes will be critically appraised against the strengths and limitations of data source (acquired through the previous data checking and exploration work). Templates of the reports or structures of result presentation will be developed and sought for comments from the Department of Health and relevant organisations (e.g. data custodians, PHNs). Preliminary results and interpretations of the results will be presented to key stakeholders to gain further insights about accuracy, clarity and implications.

10 Constraints and limitations

This Chapter describes the constraints and limitations to the evaluation and discusses their potential impact.

Complexity of intervention

The HCH program is a complex intervention in that it involves:

- Several different components (e.g. practice population risk stratification, patient enrolment, care planning, bundled payment, and theorised changes in the way primary care is delivered and patient activation).
- Steps/processes for implementation at the macro (policy design and implementation), meso (PHN facilitation and support) and micro (practice changes and patient changes).
- Multiple outcomes.

Evaluation of complex interventions entail many challenges. It is possible that not all the questions specified for the evaluation can be fully addressed due to this complexity and the interaction of the various elements. The evaluation has been designed to address aspects of this complexity, following guidance developed for evaluations complex interventions (Medical Research Council, 2006). Specific steps taken have included:

- Developing a theory of change that describes how the program is intended to impact on outcomes (Figure 1).
- Evaluation of structure and processes as well as outcomes.
- Inclusion of data sources and measures that address varies steps involved the implementation.
- Developing a comprehensive description of the intervention and its implementation and ensuring that data are collected that describe the implementation process.
- Mixed methods that capture qualitative as well as quantitative data.
- Economic evaluation.
- Processes to allow stakeholders to provide feedback on evaluation findings.

Observational (quasi experimental) design

HCH is a practice-level intervention. Also, many of the measures for the evaluation are to be derived from patients within practices. The evaluation design is observational and does not involve random assignment of practices to an intervention (HCH) arm and a control arm. This feature reflects the approach to implementation of the program itself: practice nominated themselves to participate in the program, and selection criteria were applied by the Department to decide which practices were invited to participate. Also, the Department of Health's request for quotation for the evaluation specified that 'control' practices would not be recruited for the evaluation. As a result, the comparative aspects of the evaluation will be based on observational data. Implementing an evaluation design involving random

assignment of practices would be challenging. A parallel group design in which measures for intervention and control practices were assessed simultaneously would be challenging as control practices would have limited motivation to participate in the trial over its duration, even if costs for evaluation tasks were reimbursed. A stepped wedge design Hemming, Haines, Chilton et al., 2015 in which practices were randomly assigned to early and late commencement of implementation could have been feasible. In this approach, the crucial issue is that assignment to early and late commencement is randomised. There would need to be a delay of around 12 months between early and late commencement given the period of time in which initial effects are likely to be observable. An additional problem for both parallel groups and stepped wedge designs is that practices within intervention and control groups will not be blinded to the allocation. There is also likely to be 'contamination' between the arms of the trial, for example, intervention and control practices being both exposed to information and training delivered as part of the implementation, or intervention practices sharing information about implementation with control practices. The evaluators will employ scientifically valid techniques to ensure adjustments are made for observed confounders when comparing patients from HCH practices with comparator patients. However, it is almost certain there will be unobserved confounders that will impact the estimates of effects of HCH as an intervention.

Selection of patients

The program involves a risk stratification tool (RST) to be used by all HCH practices. However, GPs will have discretion over which patients will be invited to participate in the program. The factors influencing selection are unlikely to be fully observed. In addition, patients will decide whether they wish to enrol in the program and there are likely to be unobserved factors that impact these decisions. Both these issues (GP and patient selection decisions) are likely to contribute to selection biases in the comparisons of HCH patients and comparators. Comparisons of enrolled and other patients will be performed using extracts from practice clinical information systems and linked MBS/PBS/hospitalisation data, but there are likely to be other characteristics beyond those captured in these data sources that contribute to selection biases. The selection biases may impact the estimate of effects. Reasons that patients were not selected will be explored in interviews with GPs and practice nurses as part of the case studies and through the practice surveys. While these selection effects may impact the estimates of effects, they have a pragmatic value in that they will assist the evaluation to identify implementation issues for the program when wider roll-out is considered.

Length of time for changes in outcomes to be observed

Stakeholders are ultimately interested in the impact of the HCH program on clinical outcomes and the use of hospital services. However, many stakeholders also believe that it will take several years before these will be observed. First, changes in primary care practices intended to occur as a result of the program will take some time to be fully embedded into the routines of care delivery, and as a result it is unlikely that changes in clinical outcomes and measures that reflect the clinical status of patients, such as hospitalisation rates will be observed for several years. Evaluations of programs similar to HCH have often described similar challenges. These issues may be exacerbated by delays in commencement of implementation of HCH in practices. Evaluation of changes in hospitalisation rates may be further exacerbated by delays in the receipt of linked hospital and MBS/PBS data sets. To

address these concerns many of the measures identified for the evaluation include measures that are theorised to be antecedents of the intended outcomes, for example, changes in clinical processes related to chronic disease care and patient assessments of primary care and self-efficacy. Also, infrastructure has been established that will enable the longer-term outcomes to be assessed should the program be extended.

Heterogeneity in the implementation of HCH within practices

The HCH program involves a range of processes (such as risk stratification, patient enrolment, shared care planning, bundled patient, practice facilitation and education). However, how a practice responds to these changes has not prescribed—there is no HCH `model of care'. Further, there are differences between practices, beyond the strata identified for the study in how implementation occurs. For example, in some practices all GPs are participating in the program and enrolling patients. In others, only some GPs are participating. Some practices are focussing on patients with specific chronic conditions. Others have enrolled a diverse range of patients. Some have many patients enrolled and others only a few. The variety of responses to the program by practices will be one focus of the evaluation. However, the heterogeneity may impact the change in other outcomes assessed. To address these issues, the evaluators will attempt to categorise/quantify difference between practices and control for these in the analysis.

Quality and consistency of practice data extracts

The evaluation will rely on extracts of data from practice clinical management systems. There are several practice management systems implemented across the HCH practices. In addition, the extracts will be provided through several extraction mechanisms. It is likely that extracted data will vary in quality, partly reflecting the quality of the underlying data but also, potentially, variations between practice clinical management systems and extraction mechanisms. As several of the measures identified for the study rely on these extracts, this may impact on the capacity of the evaluation to draw conclusions about these measures. The approach taken to gathering these measures reflects from pragmatic decisions to utilise extraction processes already in place with the PHNs and the preferences of the group-based practices (e.g. Aboriginal Community Controlled Health Services, corporate-based practices). There were other pragmatic conditions in using these data source. The key evaluation measures derived from these data reflect the National Key Performance Indicators (nKPIs) which are currently reported by Aboriginal Community Controlled Health Services and which may play a significant role in the Practice Incentive Program for general practice. Hence, amongst many services, there is a focus on ensuring the data underpinning these measures are of reasonable quality.

Delays in obtaining secondary data

For secondary data, the evaluators will rely on a range of agencies to supply data. Most of these agencies (e.g. the Department of Human Services, Department of Health and Australian Institute of Health and Welfare) are experienced with similar processes and in general, delays are not expected. However, some aspects of the data, specifically the linkage of MBS, PBS and hospital data may be delayed. Other sources (practice extracts, practice surveys) depend on the cooperation of a wide range of individuals and organisations. Delays in receipt of data may push out the time fame within which the evaluation reports are delivered.

Non-responses to surveys

Practices and practice staff may not respond to evaluation surveys. In addition, there may be missing responses to some question. The processes to address late responses to surveys are discussed in the Data quality control Chapter (page 64). However, ultimately some practices may not respond to one or more of the surveys. In this case, the evaluators will consider methods for imputing values for relevant covariates.

Ethical considerations

11

The evaluation of HCH raises ethical concerns given the use of patient and practice data collected for purposes other than the evaluation, and collecting information from patients and practice staff through surveys, interviews and focus groups. The key considerations and the way that they will be addressed are outlined below.

Patients enrolled in HCH

The use of data on patients carries concerns about how these data will be used, and how patients' privacy will be protected. Entry into the HCH program will entail obtaining explicit consent to participate in the evaluation. Informed consent will be obtained to gather and use survey, interview and focus group data obtained from patients on their experience with the HCH program. Patients will also be informed that the HCH evaluation will also access other health information, including information used by their doctor to manage their health, and data generated through their interactions with the wider health system, such as medicines dispensed at pharmacies, claims for visits to other doctors and for imaging and pathology, and visits to hospital.

A waiver of consent will be sought to access secondary data for patients enrolled in HCH, as seeking consent will create greater risks to breech of personal information (i.e. by patients' personal information being passed on to and stored by the evaluation team). It also has the potential to introduce bias into the research. That is, the requirement for consent from each individual may compromise the necessary level of participation. This will affect the generalisability and validity of the results.

Comparator patients

Data for matched (i.e. on age, location) patients to those enrolled in HCH will be drawn from secondary data sources, including practice data and national data sources (specifically, MBS, PBS, Fact of death, hospitalisation and emergency department attendance data). A waiver of consent will be sought for access to data for comparator patients on the basis that there is no 'entry point' for these patients into the evaluation (and thus no direct contact between the evaluation team and this patient group), and it is impracticable to gain consent of individuals due to the size of the population (potentially over 100,000 patients).

Aboriginal and Torres Strait Islander patients

Given that HCH is targeting people with chronic disease, and that chronic disease is more prevalent amongst Aboriginal and Torres Strait Islander people compared with other Australians, there is expected to be a concentration of Aboriginal and Torres Strait Islander patients in the study.

The evaluation will adhere to the Aboriginal Health and Medical Research Council (AH&MRC) and National Health and Medical Research Council (NHMRC) guidelines for undertaking Aboriginal health research, including:

- Strong engagement with Aboriginal communities and researchers.
- Use of skilled experienced qualitative researchers for data collection and analysis.

- Intensive team-based data collection, analysis and synthesis to ensure comprehensive understanding of findings.

This will ensure that the evaluation is conducted in a culturally appropriate manner, and that any risks of harm to these populations are identified and managed.

Practice and PHN staff

The experience of health staff involved in the HCH program will be collected by survey, and through interviews with practice and PHN staff. The letter of agreement signed by the practices participating in the trial will contain information about the evaluation, specifically that practice members will be approached to provide information (through a survey or interview, or both) about their experiences of the HCH program. Informed consent will then be obtained at the time of the survey/ interview. PHNs with one or more practices participating in HCH will be notified of the intent of the evaluation to gather their views about the implementation amongst their practices. Informed consent will then be obtained from individuals at the time of the survey/ interview.

Provision for secondary uses of the evaluation data

The data compiled for the evaluation is likely to have other applications beyond the immediate ones identified for evaluation. Therefore, it is intended to make the data set available for secondary uses. This will be requested in the ethics applications for the project. Any secondary uses will be subject to separate approvals from the relevant human research ethics committees. Data available for secondary use will not identify any individual under any circumstances. However, where they identify or potentially identify organisations or communities, researchers will need to also seek consent for the use of the data from the relevant organisations or communities.

12 Dissemination strategy

Dissemination is an important component of evaluation. It ensures the use of findings from the evaluation and the sharing of lessons learned. It also helps to tailor materials produced from the evaluation to the needs of key stakeholders reflecting the interest of each group. Articulating an evaluation dissemination strategy in the early stages of the project assists in ensuring that the project is conducted with these objectives in mind.

Dissemination products

The major products that are intended from the evaluation are:

- **Ministerial/ governmental briefings**. A set of papers intended to inform various governments on the progress of the evaluation, emerging and final findings.
- **Evaluation protocol paper**. The evaluation team intends to develop a paper for publication in a peer reviewed journal outlining the evaluation methodology. The purpose of the paper will be to share the methodology with researchers and other stakeholders.
- **Other publications in peer reviewed literature and conference presentations**. Manuscripts on other aspects of the evaluation, including processes for conducting the evaluation, challenges encountered, and findings, are intended to be published in relevant peer reviewed journals. Opportunities to present at conferences will also be sought.
- **Presentations/ forums for discussion**. Opportunities for input by stakeholders on various aspects of the evaluation, including the design, process, and interpretation of results.
- **Evaluation tools**. Surveys and other tools that are not protected for reasons of copyright will be available to interested audiences to use beyond the trial.
- **Interim reports**. Reports on the baseline and interim findings of the evaluation.
- **Final report**. A comprehensive report on the findings of the evaluation, and implications for future rollouts of HCH.
- **Brief Plain-English final report**. A summary report of the final report developed for the wider community.
- **Media releases.** Public announcements on key steps, progress and findings from the evaluation.
- **Evaluation data set.** It is intended to make a data set of the evaluation available for secondary use. This will be requested in the ethics application for the project. Any secondary uses will also be subject to ethics approval.

Intended audiences for the dissemination

The intended audiences for the products of the evaluation and their interest in the findings and lessons learned from the project are outlined in the Table below. This Table also identifies the anticipated dissemination strategy for each of the key audience groups. At this stage, the dissemination strategy is a broad strategy and is likely to evolve throughout the life of the project.

Table 15 – Project stakeholders

Stakeholder type	Interest in the products/ findings	Dissemination products and strategy
Minister for Health, Assistant Ministers and the Australian Government	Implications for policy and planning in relation to primary health care.	• Ministerial/ governmental briefings. • Brief Plain-English final report.
Council of Australian Governments (COAG) **Australian Health Ministers Advisory Council (AHMAC)**	Implications for policy and planning in relation to primary health care and state-federal funding arrangements.	• Ministerial/ governmental briefings. • Will receive interim and final reports of the evaluation.
Australian Government Department of Health	Implications for policy and planning in relation to primary health care. The findings will provide the Department of Health with an understanding of the aspects of HCH that are working well, and barriers and facilitating factors that influence the implementation of HCH. It will also inform further rollouts.	• Access to all products of the evaluation, in draft and final forms.
Implementation Advisory Group (IAG)/ Evaluation Working Group (EWG)	The evaluation products will provide accountability for the processes undertaken by this group and key learning and inputs to improve future processes, and the results of the evaluation to inform policy and planning.	• Presentations/ forums for discussion. • Will receive interim and final reports of the evaluation.
Other government departments/ decision-makers	There are likely to be several other government departments interested in information on results from trial. The focus of their interest may be on the evaluation process and lessons learned about conducting the evaluation. Their interest may also be in the products or tools that are developed as part of the evaluation, and how the findings can be used to inform policy and practice.	• Brief Plain-English final report.
PHNs, peak bodies	These groups are likely to be interested in receiving feedback on the implementation of the project, and the findings and their implications for policy and practice.	• Presentations/ forums for discussion. • Final report of the evaluation. • Brief Plain-English final report.

Stakeholder type	Interest in the products/ findings	Dissemination products and strategy
GPs, practice owners and other health staff	These groups are likely to be interested in receiving feedback on implementation of the project, and the findings and their implications for policy and practice	• Final report of the evaluation. • Brief Plain-English final report.
Research community/ academic institutions	These institutions are usually interested to receive research and studies that can enhance their ongoing research and evaluation of models of health care, and other major policy reforms and initiatives.	• Other publications in peer reviewed literature and conference presentations. • Access, through appropriate channels (including ethics approval) to data sets arising from the evaluation.
The community/ consumers	In general, members of the broader community, including consumers of primary health care services, expect that evaluations contribute to transparency in the management of public resources and want information regarding the achieved results and the main activities carried out during an intervention.	• Media releases. • Brief Plain-English final report.

Strategies and timeframe for dissemination of key products

The Table below identifies the dissemination strategies for the key evaluation products.

Table 16 – Dissemination strategies for key evaluation products

Product	How it will be disseminated	Timing
Interim reports	• Progress of the evaluation presented to the Department of Health (including EWG and IAG).	December 2019 December 2020
Final report	• Final report presented to the Department of Health (including EWG and IAG).	December 2021
	• Key findings of the final report presented to Ministers/COAG.	Latter half of 2021
	• Final report (in full, as well as brief Plain-English version) released publicly on Department of Health website.	First half of 2022
Other publications	• Scholarly articles submitted to peer reviewed journals. • Conference presentations.	Ongoing throughout the evaluation and following

Appendix A – Sampling frame for practices participating in the HCH trial

Practices participating in HCH trial will be selected from practices that have submitted a proposal in response to a competitive grant process undertaken by the Department of Health. The Department of Health has applied several criteria that practices must meet to be considered for participation. Amongst these is a requirement that the practice has achieved accreditation with the Royal Australian College of General Practitioners Standards, and maintains its accreditation, or be registered for accreditation, and that the practice participates in, or is prepared to participate in, the Practice Incentives Program eHealth Incentive.

There are two criteria for assessing practices for participation:

- Criterion 1: Demonstrated capacity to implement the objectives of HCH, which may include having implemented a similar program, or the proven capacity to develop this capability within the required timeframe.
- Criterion 2: Demonstrated capability to identify eligible patients to be enrolled.

Subject to a practice meeting the eligibility criteria and the two assessment criteria, the Department of Health will select up to 200 practices/ health services. In selecting practices, a sampling frame has been developed, to ensure there is an appropriate mix of practices across Australia. The sampling frame includes the dimensions and categories shown in Table 17 below. The frame contains four dimensions: practice ownership, practice size (in terms of number of GPs), practice staffing (in addition to GPs) and geographic location.

Table 17 – Sampling frame

Dimension	Category	Description
Practice ownership	1	GP owned
	2	Corporate ownership
	3	Aboriginal Community Controlled Health Services (ACCHSs)
	4	Other
Practice size	1	Sole practitioner/1 GP
	2	2-5 GPs
	3	6+ GPs
Range of clinical staff available at the practice	1	GP only
	2	GP plus practice nurse
	3	GP plus other clinical staff (e.g. allied health)
Location (based on Modified Monash (MM) Model category)	MM 1	All areas categorised ASGS-RA1.
	MM 2	Areas categorised ASGS-RA 2 and ASGS-RA 3 that are in, or within 20 km road distance, of a town with population >50,000.
	MM 3	Areas categorised ASGS-RA 2 and ASGS-RA 3 that are not in MM 2 and are in, or within 15 km road distance, of a town with population between 15,000 and 50,000.
	MM4 & MM5	All other areas in ASGS-RA 2 and 3.
	MM6 & MM7	MM6 includes all areas categorised ASGS-RA 4 (remote) that are not on a populated island that is separated from the mainland in the ABS geography and is more than 5 km offshore. MM7 includes all other areas – that being ASGS-RA 5 (very remote) and areas on a populated island that is separated from the mainland in the ABS geography and is more than 5 km offshore.

Categories for the geographic location dimension are to be based on the Modified Monash (MM) Model. The MM Model uses information related to the size of particular population settlements within the broader categories of the Australian Statistical Geography Standard — Remoteness Areas (ASGS-RA) classification. for the sampling frame for HCH, the MM4 and MM5 categories will be combined into a single category, and the same with the MM6 and MM7 categories.

The purpose of applying the sampling frame is to ensure that the trial generates sufficient evidence to determine that HCH will be effective for practices in each of the strata, that differences in effectiveness can be estimated, and that issues associated with implementation for practices within this range of characteristics can be identified. To achieve these aims, the Department of Health is proposing a minimum of 10 practices represented in each of the strata, except for the 'Other' category for practice ownership

Appendix B – Statistical power estimates

Initial estimates of the statistical power of the evaluation design are being prepared. For the many comparative elements of the evaluation it is planned to include all patients enrolled in the program in the analysis. In this circumstance the sample size will be determined by other program related factors, and the analysis of statistical power provides a basis for understanding whether the evaluation will be able to detect effects if these exist. In other aspects of the study, decisions may be required on the size of the sample of patients invited to complete a survey. For this purpose, the analysis of statistical power provides a basis for determining an appropriate sample size, to detect relevant effects/ differences if these exist.

All sample size calculations will be conducted using a 1% significance level and 80% power. Adjustment for the clustering of patients within practices is achieved by using the equation below, where n is the number of patients required per cluster in the final analysis, n_0 is the number of patients required per cluster under the assumption that patients included in the analysis are independent (i.e. there is no clustering within the practice), and the ICC is the intracluster correlation coefficient:

$$n = \frac{n_0(1 - ICC)}{1 - n_0 ICC}$$

This equation is slightly different from the more commonly used approach, which is based on the design effect (DE) (where m is the mean number of subjects per cluster):

$$DE = 1 + (m - 1)ICC$$

The previous equation is more appropriate when the number of clusters is fixed, as it will be in the evaluation of HCH. Otherwise, the design effect approach will need to be applied recursively (Campbell, 2000).

Patient surveys

Key question 3 relates to estimating changes in the experience of chronic disease care for patients enrolled in the HCH program. One of the sources of information for this question is the survey of patients measuring patient experience. Items on the questionnaire will be summarised across relevant domains, and the analysis will be largely undertaken using domain scores.

It is unknown what proportion of patients invited to participate in the surveys will accept the invitation. Evidence from similar studies is relevant to estimating the required number of subjects to achieve the required level of statistical power. Hurst, Ruta and Kind (1998) compared the performance of the SF12 and SF36 in measuring change over a three-month period and reported the correlation of the repeated measurements of the mental health component scores and the physical health component scores on the SF12 were 0.71 and 0.75, respectively. Other authors have reported a similar high level of correlation for these and other measures of quality of life over a 12-month period (Vickers, 2003).

Patient surveys for the HCH will be repeated twice, with a maximum difference in time between surveys of 24 months. Hence, the preliminary sample size calculation assumes a correlation of 0.5 between measurements. Assuming an intracluster correlation coefficient (ICC) of 0.05, the study would require *nine subjects per cluster* to have 80% power to detect a 0.1 standard deviation difference between baseline and follow-up. This equates to 1-unit change on a standardised SF12 or SF36 measure. The 0.1 standard deviation change will apply to any questionnaire with similar level of correlation between the baseline and follow-up measures.

It should be noted while there are potentially 200 clusters (practices), the analysis for the evaluation mainly aims to group these clusters into subgroups. The power of the subgroup analysis will be very sensitive to any increase in the value of the ICC.

Comparative analysis using secondary data

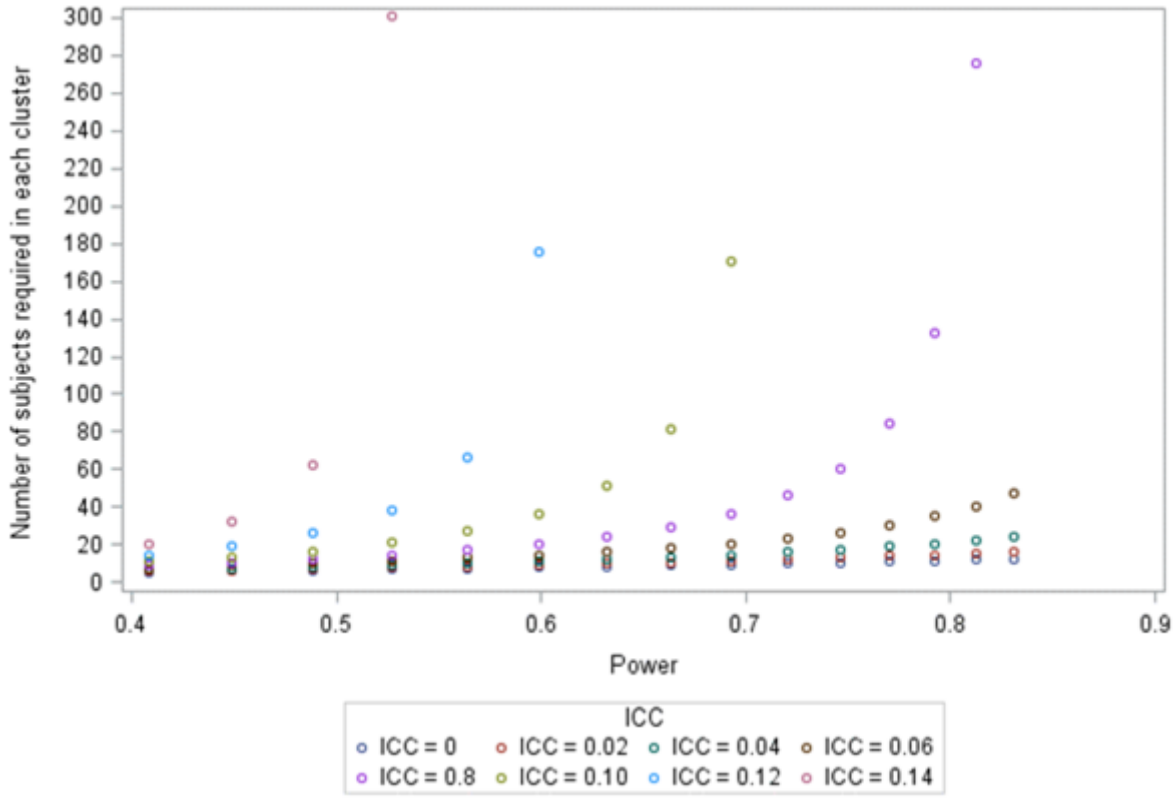
Key question 2 relates to estimating changes in the quality of care for HCH patients. This question will be answered by testing for a difference in change between the intervention and comparison cohorts. Several different measures will be tested to examine this question, so the sample size calculation will be presented in generic terms. Similar assumptions have been used in these calculations as were made for the sample size calculation for the patient surveys.

Assuming the correlation between repeated measurements on an individual is 0.5, which is probably conservative for biophysical measures or clinical markers, the standard deviation of the within person change will equal the standard deviation of the measurements at baseline and follow-up (assuming the standard deviation of baseline and follow-up measurements are the same). Further assuming an ICC of 0.05 for the within person estimate of change, the study will have more than 80% power to detect a difference of 0.1 standard deviations in change between the intervention and comparison cohort if at least 29 subjects per cluster are included in the analysis. For example, this would equate to a difference of approximately 0.1% in the measurement of HbA1c among patients with diabetes.

For dichotomous outcomes, it is assumed the percentage of patients with the outcome of interest in the comparison group at follow-up is 50% because it is the worse-case scenario in terms of a sample size calculation, and therefore it will maximise the sample size required. Using the same number of subjects as estimated for the sample size for the continuous outcomes above, the study will be able to detect a difference in change of 5% in the percentage of individuals with the outcome, which is about 0.1 of a standard deviation based on the normal approximation to binomial when the proportion with the outcome is 0.5.

Figure 5 below shows the number of subjects required per cluster to achieve a given level of power to find a difference of 0.1 standard deviation for a range of values of the ICC. Of interest is the substantial increase in the penalty as the ICC increases, for example to achieve just over 80% power, the study requires 16 subjects per cluster when the ICC = 0.02 and 276 subjects per cluster when the ICC = 0.08. There are no circles above 80% power for some ICCs, indicating that it is not achievable under this scenario regardless of how many people are sampled from each cluster. For example, if the ICC is 0.10 the study would not achieve 80% power to detect a 0.1 standard deviation difference regardless of how many patients were sampled from each practice.

Figure 5 - Number of subjects per cluster required for a given level of power



Note: Continuous outcome and a range of ICC values.

Key question 4 relates to estimating differences in service use, including hospitalisation. This question will also be examined by testing for a difference in change between the intervention and comparison cohorts and consequently the power calculations outlined for key question 2 also apply to key question 4. Key question 4 will also examine the impact on the number of hospital admissions, the number of emergency department presentations, and a range of MBS and PBS outcomes that will be recorded as counts. The calculation presented here is for the outcome of hospital admissions. Of all the outcomes, hospital admissions are likely to have the lowest counts and therefore require the largest sample size to detect a real effect. It is assumed that the mean number of hospital admissions over a 12-month period for patients enrolled in HCH will be two and that attaining a 10% reduction (to a mean of 1.8) in admissions would be considered a meaningful difference. We have also assumed an over dispersion parameter of 0.4 and an ICC of 0.05. With these assumptions, the study will have 80% power to detect a 10% difference in hospital admission with 19 patients per practice. This calculation is close to the boundary of unachievable outcomes for the specified inputs and therefore is sensitive to the value of the ICC. If the ICC was 0.10 rather than 0.05 then 374 patients per practice would be required. For the same number of patients, the study will have more than 80% power to find a 10% difference in change in other outcomes where the mean number of events per year is greater than two.

Validity considerations

Possible threats to the external and internal validity of the study design have been considered and are outlined below.

There will be **non-random allocation** between the intervention and comparison groups. This will mean that there is the potential for unobserved differences between the intervention and comparison groups to impact the estimation of effects. Randomisation would ideally have occurred at the level of the practice (a cluster randomisation design). However, neither of the options was available for pragmatic reasons related to the nature of the rollout of the intervention. An important consideration here is that there is no capacity to explicitly engage comparison practices for the evaluation. A step wedge design is an alternative design, whereby practices enrolled in HCH are randomly allocated to early commencement and late commencement group(s). This design was not feasible for the trial, but could be used to compare the trial practices with those commencing in subsequent rollouts, although this will still involve non-random allocation.

The absence of randomised allocation between intervention and comparison groups can be ameliorated by collecting and including measures to assess and adjust for the comparability of intervention practices and patients with the comparators.

Related validity concerns include **selection bias** that may be observed at the practice level and the patient level. Various aspects of the potential biases and steps to estimate or address these are described below:

- ***Intervention practices:*** Practices participating in the HCH trial are likely to be different to those that did not apply. As discussed above, practices must meet particular selection criteria (e.g. accreditation), be capable of implementing the various aspects of HCH and be motivated to be involved in this undertaking. Motivations for volunteering for participation are not known at this stage but will be explored in interviews with practice staff. If participating practices are not representative of practices more generally, this is more a challenge to the **external validity** of the evaluation rather than to the internal validity. External validity will be improved by applying the sampling frame described previously, so that the evaluation is able to estimate the effects of the model for different types of practices in different settings, and to explore the factors that impacted effectiveness across these dimensions.

- ***Comparator practices:*** While there will be no formal comparator practices, practice data extracts will be sought from a national quality improvement/ benchmarking initiative. Practices that participate in this initiative may not be representative of practices generally. Characteristics of these practices may not be known. National data sources (MBS, PBS, hospital and emergency department data) do not include comprehensive information on the general practices or services to which patients relate, as there is no formal mechanism for patient enrolment in general practices in Australia. For MBS data, there is information related to the provider of the service, and it may be possible to determine whether a provider belongs to a practice that participates in the Practice Incentives Program. Patients may be able to be assigned to 'virtual' practices using the national data, for which a range of characteristics could be derived or estimated. The resulting virtual practices could be used in the selection of patient comparators from the national data.

- ***Intervention patients:*** Intervention patients will be identified by practices using information from risk stratification as well as clinician judgment. Patients will be invited to participate in HCH and may refuse. Patients may agree to participate in the HCH program, but not consent to participate in the evaluation. Impacts of these factors may be investigated by comparing the profiles of patients identified as being high-risk in the first stage of the risk stratification process with the profiles of patients who agree to participate in the evaluation. Interviews with practice staff can be used to identify factors that GPs considered in determining the appropriateness of HCH for patients, and the reasons patients gave for not participating in the HCH and/ or the evaluation.

- ***Comparator patients:*** Comparator patients will not have been identified through the same process described above. Therefore, there may be important unobserved differences between the comparator and intervention groups. One strategy to achieve comparability between groups is to apply the same risk stratification system to both groups, using as broad a range of information as is available.

It is not feasible to have a design that blinds researchers to practices that are part of the HCH trial, and to the patients that have been enrolled in HCH.

For the before-and-after aspects of the evaluation, patients (or a sample of patients) enrolled with HCH will be invited to participate in patient surveys. The mechanisms for inviting patients to participate in the surveys need to be designed to avoid a biased sample of patients invited. For example, if patients are invited by a practice following an appointment, only those patients that have an appointment during the time frame in which the survey is required to be distributed will be invited. Also, practices may only approach patients that they asses to be able to complete the survey.

An important issue is the appropriateness and validity of measurement instruments used for this evaluation for Aboriginal and Torres Strait Islander people and other people from culturally and linguistically diverse backgrounds. The assessment of these issues is outlined further in the discussion of each of the instruments discussed below. Strategies that will be required to address these issues may include: piloting instruments, use of alternative means for administering instruments and others (to be developed).

Twenty HCH practices (a 10 per cent sample) will be selected to participate in qualitative data collection (interviews/ focus groups). These practices should be selected on the basis that they can provide adequate representation across the strata discussed above.

Missing data may be an issue for aspects of the evaluation. Four areas of missing data are as follows:

- Use of general practices by patients enrolled in HCH. Once a patient is enrolled in HCH, the practice will not claim MBS Items for the provision of services related to the chronic conditions of the enrolled patient. Estimates of use of services delivered in this context will rely on extracts from the practice systems or a survey of the practices whereby they collect this information for a sample of patients (this is yet to be determined). The completeness and quality of these data is unknown. There is a risk that the level of use of these services will be unknown or poorly recorded.

- The national data sets identified for the evaluation are mostly complete representations of the services claims/ accessed by patients. However, there are some gaps in measures of use that will require specific attention in analysis and exploration in qualitative analysis. These include:
    - Not all emergency department presentations are captured in the Non-Admitted Patient Emergency Department (NAPED) data collection. Specifically, many small rural hospitals do not contribute patient level data to this collection. For the evaluation, information on the extent of participation in the NAPED will need to be obtained for localities in which participating practices operate.
    - Not all primary care services delivered by ACCHSs claim MBS. Therefore, data on use of these services will rely on practice extracts. Data related to use of services by patients enrolled in one ACCHS, who seek care from another ACCHS, where this is not billed to MBS, will not be available for the evaluation. Qualitative interviews with patients will be used to explore the extent to which this occurs.
    - Data on use of non-PBS pharmaceuticals will not be directly available.
    - There may be gaps in data on use of allied health services. These will be captured if the service is billed to MBS. Services delivered by private allied health service providers, paid for by private health insurance or out-of-pocket payments, and services delivered by government community health or hospital services are unlikely to be directly captured. Data from practice extracts may provide an insight into referral for use of these services. Patient surveys will also include some questions about the use of allied health services. However, a full picture of the use of allied health services is likely to be challenging.
- Practices, practice staff and patients may not respond to all questions included in the surveys. Missing items from practice surveys can be followed up through enquiries to practices. Otherwise these items can be addressed through statistical techniques for dealing with missing data.

Appendix C – Practice survey

Health Care Homes program practice survey - Round 1 Part A

This survey asks questions about the implementation of the Health Care Homes (HCH) program in your primary care practice/ service. Part A of the survey for Round 1 focuses on characteristics of your practice. It also aims to capture information about quality initiatives that the practice has been participating in prior to the commencement of the HCH program. Part B of the survey relates to the applying the HCH-A tool. The Part B component will be reported in a separate survey.

Responses to Part A of the survey should be coordinated by a designated person in the practice, for example a practice manager. Some responses may require consultation with other staff in the practice.

A link has been provided to the survey. You may return to this link on several occasions. The survey should be completed by 16 March 2018.

The information that you provide will be kept strictly confidential, and will not be used for any other purpose other than the evaluation of the HCH program. All reports of the evaluation will only contain descriptive information about individual practices/ services (e.g. geographic location in summary categories such as rural, remote, very remote). No ratings or views will be attributed to any individual practice/ service.

The evaluation is being conducted by Health Policy Analysis, on behalf of the Commonwealth Department of Health. If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

The HCH evaluation has been approved by the Department of Health Human Research Ethics Committee Project 04-2017 – Health Care Homes Program, Part A: National Evaluation. If you have any concerns or complaints on the ethical conduct of this research, please contact the Committee Secretariat by email at ethics@health.gov.au. The issue will then be referred to the Chair of the Committee.

If you have any questions regarding the HCH program, please contact healthcarehomes@health.gov.au.

1. Practice / service name

2. Who should be contacted if we have any questions about your responses to this survey?

   Name (1) _____

   Phone (2) _____

   Email (3) _____

3. Locations at which the practice/ service operates

	Street number and name (1)	Suburb/Town (2)	State (3)	Postcode (4)
1 (1)				
2 (2)				
3 (3)				
4 (4)				
5 (5)				

4. Is the practice/ service part of a larger group/ organisation? If yes, please provide the name of the organisation.

   ☐ Yes (2)
   ☐ No (1)

5. What type of organisation is the practice/ service (or group/ organisation if the practice/ service is part of a larger group/ organisation)?

- ☐ Aboriginal corporation incorporated under the Corporations (Aboriginal and Torres Strait Islander) Act 2006) (1)
- ☐ Company incorporated under Corporations Act 2001 (Commonwealth of Australia) (2)
- ☐ Incorporated association incorporated under Australian state/territory legislation (3)
- ☐ Incorporated cooperative incorporated under Australian state/territory legislation (4)
- ☐ Organisation established through specific Commonwealth or state/territory legislation (5)
- ☐ Partnership (6)
- ☐ Trust on behalf of a trust (7)
- ☐ Individual (8)
- ☐ Other, please specify (9) _____

6. Is the group/ organisation registered as a charity or non-for-profit organisation with the Australian Charities and Not-for-profits Commission?

- ☐ Yes (1)
- ☐ No (2)

7. Is the group/ organisation an Aboriginal Health Service?

- ☐ Yes, Aboriginal Community Controlled Health Service (1)
- ☐ Yes, Other Aboriginal Health Service (2)
- ☐ No (3)

8. As at the commencement of the HCH program (1 October or 1 December 2017), how many staff are/were employed in the practice/ service, by the type of staff? Please provide the head count (number of actual people) and full time equivalent (FTE) for each staff type. How many FTE vacancies were there at that date?

	Head count (1)	Full-time equivalent (FTE) (2)	Vacancies (FTE) (3)
General medical practitioners, please provide additional details in Question 9 below (1)			
General practice registrar/advanced trainee (4)			
Other medical practitioner, please specify (6)			
Nurse practitioner (Registered nurse) (7)			
Remote area nurse (Registered nurse) (8)			
Practice nurse (Registered nurse) (9)			
Practice nurse (Enrolled nurse) (10)			
Nursing assistant/Assistant in Nursing (11)			
Aboriginal Health Worker (12)			
Medical practice assistant (13)			
Allied health. Please provide details in next question 10 below (23)			
Allied health assistant (24)			
Practice manager (25)			
Receptionist/ Administrative staff (26)			
Other. Please specify: (27)			

9. Please provide additional details of the GPs who work in the practice. Please also indicate how many of these GPs are participating the HCH program.

	GPs		GPs participating in the HCH program	Comment (if required)
	Head count (1)	Full-time equivalent (FTE) (2)	Head count (3)	
Owner/ partner				
Salaried				
Contract				
Other				

10. If allied health staff or allied health assistants are/were employed at the commencement of the HCH program, please provide details of how many are/were employed in the practice/ service, by discipline. Please provide the head count (number of actual people) and full time equivalent (FTE) for each staff type. How many FTE vacancies were there at that date?

	Allied health staff/ assistants head count (1)	Allied health staff/ assistants full-time equivalent (FTE) (2)	Allied health staff/ assistant vacancies (FTE) (3)
Physiotherapist (25)			
Dietitian (15)			
Exercise Physiologist (16)			
Psychologist (17)			
Social Worker (18)			
Audiologist (19)			
Optometrist (20)			
Pharmacist (21)			
Dentist (22)			
Other Allied health. Please specify: (23)			
Other Allied health. Please specify: (24)			
Other Allied health assistant. Please specify: (27)			
Other Allied health assistant. Please specify: (28)			

11. Please provide any other information that will assist us to understand the staffing for the practice/ service.

12. Do any GPs within the practice/ service have formal arrangements for working with/ in local hospitals (e.g. GP Visiting Medical Officer)?

- ☐ Yes (1)
- ☐ No (2)

13. How do you rate the access to the listed health services within your local community? These may be delivered by health professionals working in other organisations/practices or within your practice/service.

	Usually available in local community or nearby (1)	Sometimes available (e.g. visiting services) (2)	Not usually available (patients have to travel to another town, or a large distance to access these services) (3)
1 Pharmacy (1)	❑	❑	❑
2 Physiotherapist (2)	❑	❑	❑
3 Dietitian (3)	❑	❑	❑
4 Psychologist (4)	❑	❑	❑
5 Social Worker (5)	❑	❑	❑
6 Dentist (6)	❑	❑	❑
7 Optometrist (7)	❑	❑	❑

14. Please provide any other information that will assist us to understand the level of access to allied health services for people living in your local community.

15. Does the practice/service participate in any arrangements through which visiting medical specialists provide outreach services at the practice/service?

    ❑ Yes (1). Please briefly describe these arrangements.
    ❑ No (2)

16. What components of the Practice Incentive Program (PIP) does the practice participate in? (select all that apply)

    ❑ Asthma incentive (1)
    ❑ Practice Incentive Program After Hours Initiative (2)
    ❑ Cervical Screening Incentive (3)
    ❑ Diabetes Incentive (4)
    ❑ eHealth Incentive (5)
    ❑ General Practitioner Aged Care Access Incentive (6)
    ❑ Indigenous Health Incentive (7)
    ❑ Procedural General Practitioner Payment (8)
    ❑ Quality Prescribing Incentive (QPI) (9)
    ❑ Rural Loading Incentive (10)
    ❑ Teaching Payment (11)

17. What other quality improvement, collaborative, benchmarking, or chronic and complex disease management initiatives is the practice currently participating in or has participated in in the last two years?

    a. Initiative name _____
    b. Brief description of improvement initiative _____
    c. Does this initiative involve:

	Yes (1)	No (2)	Don't know (3)
The local PHN? (1)			
A local hospital, Local Hospital Network (LHN) and/ or state/ territory health authority? (2)			

18. Is there another quality improvement, collaborative, benchmarking, or chronic and complex disease management initiatives that the practice currently participating in or has participated in in the last two years?

- ☐ Yes (1)
- ☐ No (2)

19. What are the practice/ service operating hours?

	Opening time (24-hour clock e.g. 7:00) (1)	Closing time (24-hour clock e.g. 19:00) (2)	Closed on this day (Y/N) (3)
Monday (1)			
Tuesday (2)			
Wednesday (3)			
Thursday (4)			
Friday (5)			
Saturday (6)			
Sunday (7)			
Public holidays (8)			

20. If there are any other arrangements regarding the practice/ service operating hours, please provide these below.

21. What are the arrangements for patient attending your clinic/service to access after-hours general practice services?

22. In general, when a patient contacts your service, how long (in days) does the patient have to wait before seeing a GP?

	In an urgent situation (1)	In a non-urgent situation (2)
(1)		

23. Does your practice/ service offer patients the option to... (select all that apply)

- ☐ Request appointments online? (1)
- ☐ Contact a doctor or nurse by telephone during the practice/ service's hours of operation? (7)
- ☐ Describe the problems they wish to discuss with the GP prior to the appointment? (2)
- ☐ Leave a voice message and get a return call from a doctor or nurse (8)
- ☐ Send a medical question or concern via email or electronic message? (3)
- ☐ Request refills for prescriptions online? (4)
- ☐ View test results on a patient portal? (5)
- ☐ Review letters from specialists/ hospital discharge summarised at a patient portal? (6)

24. Is there at least one GP in the practice who makes home visits?

- ☐ Yes (1)
- ☐ No (2)

The following questions relate to the *use of information within the practice*.

25. What is the practice management system used in the practice?

- ☐ Medical Director (1)
- ☐ Best Practice (2)
- ☐ Communicare (3)
- ☐ ZedMed (4)
- ☐ Medtech 32 (5)
- ☐ MMEx (6)
- ☐ Other (7) _____

26. Prior to the commencement of the HCH program, had the practice/service implemented a software application or participated in a system to assist clinical data auditing/review, benchmarking with other services? (Select more than one if this applies)

- ☐ PenCAT/ TopBar (1)
- ☐ Polar GP (2)
- ☐ NPS MedicineWise (3)
- ☐ Other, please specify (6) _____

27. Shared care plan software:

a. Prior to the commencement of the HCH program, had the practice/service implemented a software application to assist with preparing shared care plans?

- ☐ Yes, please provide name of system (2) _____
- ☐ No (1)

b. What software will the practice/ service use for the HCH program?

_____

28. How easy is it to generate the following information about your patients using your practice management system (clinical management system) and/or other software?

	Easy (1)	Somewhat difficult (2)	Difficult (3)	Not Possible (4)
List of patients by diagnosis or health problems (e.g. diabetes, cancer) (1)	☐	☐	☐	☐
List of patients by laboratory result (e.g. HbA1C > 9.0) (2)	☐	☐	☐	☐
List of patients who are due or overdue for tests or preventive care (e.g. flu vaccine) (3)	☐	☐	☐	☐
List of all medications taken by an individual patient (including those that may have been prescribed by other doctors) (4)	☐	☐	☐	☐
List of all patients taking a particular medication (5)	☐	☐	☐	☐
List of all laboratory results for an individual patient (including those ordered by other doctors). (6)	☐	☐	☐	☐
Clinical summaries to give patients after each visit. (7)	☐	☐	☐	☐

29. In your practice/ service, do GP's routinely receive and review data on the following aspects of their patients' care?

	Yes (1)	No (2)
Clinical outcomes (e.g. percentage of patients with diabetes or asthma with good control) (1)	☐	☐
Surveys of patient satisfaction and experiences with care (2)	☐	☐
Patients' hospital admissions or emergency department use (3)	☐	☐
Frequency of ordering diagnostic tests (4)	☐	☐
Prescribing practices (5)	☐	☐

30. Does the practice/ service have the following processes/ systems in place?

	Yes (1)	No (2)
A reminder system to invite patients to recommend screening tests (e.g. Pap test, mammogram)? (1)	❑	❑
A checklist for preventive clinical practices (counselling, screening, immunisation) to carry out with patients, according to guidelines? (2)	❑	❑
A tool to assist lifestyle counselling or to help modify behaviors (e.g. smoking cessation program, health education program)? (3)	❑	❑
A system to track laboratory tests ordered until results reach clinicians? (4)	❑	❑

31. Prior to the commencement of the HCH program, did clinical staff in the practice use a standardised tool to assess the level of patient engagement/ activation?

❑ Yes, please provide name of tool (4) _____
❑ No (3)

32. Does the practice use any of the following systems/guides and if so, are these used for any of the conditions listed? Please list any other systems/guides used for these conditions and indicate the conditions for which these are used.

	System used		Conditions							
	No (1)	Yes (2)	Type 2 diabetes (1)	Coronary heart disease (2)	Heart failure (3)	COPD (4)	Osteo-arthritis (5)	Depre-ssion (6)	Anxiety (7)	Alcohol/ other drugs (8)
Health Pathways (1)	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
Map of Medicine (2)	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
CARPA Standard Treatment Manual (3)	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
Other system/ guide 1 (4)	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
Other system/ guide 2 (5)	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
Other system/ guide 3 (6)	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
Other system/ guide 4 (7)	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
Other system/ guide 5 (8)	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
Other system/ guide 6 (9)	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
Other system/ guide 7 (10)	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑

33. Please provide any further comments that would allow us to better understand systems/guides used by the practice/service for the conditions listed above.

34. Please describe the approach the practice has taken for billing patients prior to the commencement of the HCH program?

	No co-payment charged (1)	Co-payment charged (2)
Health Care Card Holders (1)	☐	☐
Other patients (2)	☐	☐

35. Please describe the approach to co-payments the practice/service is planning to take for patients enrolled in the HCH program?

36. What was the approximate average monthly expenditure of the practice/service excluding salaries/payments made to GPs?

Expenditure type	Average monthly expenditure $ (1)
Employee related expenditures for personnel EXCLUDING GPs (salaries, on-costs and contractor payments if appropriate) (1)	☐
Other operating costs including administrative costs (e.g. legal and audit, computer, meeting expenses, travel), utilities, clinical supplies and clinical services (e.g. sterilization, diagnostic tests, examination material, medications), corporate services charges, building and maintenance expenses (2)	☐
Depreciation (estimate based on last financial year)	☐

37. Do you wish to submit the results of this survey now?

If you wish to finalise and submit the survey data, select Yes below, then select the Next Arrow below. This will submit your data.

If you wish to return to this survey later, do not select Yes. Just leave this page and return later using the URL link supplied. The details you have entered above will be saved, and when you return, you can complete the survey. When you return to the survey you will be taken to the first missing response.

☐ Yes (4)

Health Care Homes program practice survey - Round 1 Part B

This survey is Part B of the Practice Survey for Round 1 of the Health Care Homes (HCH) program evaluation. It relates to the results of applying the HCH-A tool. The process for applying the HCH-A tool has been described elsewhere. This involves several staff within a practice completing the HCH-A assessment separately, followed by discussion to reach a consensus on scores for each item. The survey relates only to the final consensus score for the practice. There are also a few questions about how the HCH-A tool was applied in the practice/service

A link has been provided to the survey. You may return to this link on several occasions. The survey should be completed by 16 March 2018, although we encourage practices/services to apply the HCH-A tool prior to or shortly after the commencement of the HCH program.

The information that you provide will be kept strictly confidential, and will not be used for any other purpose other than the evaluation of the HCH program. All reports of the evaluation will only contain descriptive information about individual practices/ services (e.g. geographic location in summary categories such as rural, remote, very remote). No ratings or views requested through this survey will be attributed to any individual practice/ service.

The evaluation is being conducted by Health Policy Analysis, on behalf of the Commonwealth Department of Health. If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

The HCH evaluation has been approved by the Department of Health Human Research Ethics Committee Project 04-2017 – Health Care Homes Program, Part A: National Evaluation If you have any concerns or complaints on the ethical conduct of this research, please contact the Committee Secretariat by email at ethics@health.gov.au. The issue will then be referred to the Chair of the Committee.

If you have any questions regarding the HCH program, please contact healthcarehomes@health.gov.au.

1. Please enter the final consensus score agreed for each item of the HCH-A tool, following discussion by practice/service staff.

Question	Response
Q01 (1)	
Q02 (2)	
Q03 (4)	
Q04 (7)	
Q05 (3)	
Q06 (5)	
Q07 (6)	
Q08 (11)	
Q09 (12)	
Q10 (13)	
Q11 (14)	
Q12 (15)	
Q13 (16)	
Q14 (17)	
Q15 (18)	
Q16 (19)	
Q17 (20)	
Q18 (21)	

Question	Response
Q19 (1)	
Q20 (2)	
Q21 (4)	
Q22 (7)	
Q23 (3)	
Q24 (5)	
Q25 (6)	
Q26 (11)	
Q27 (12)	
Q28 (13)	
Q29 (14)	
Q30 (15)	
Q31 (16)	
Q32 (17)	
Q33 (18)	
Q34 (19)	
Q35 (20)	
Q36 (21)	

2. How many people participated in the HCH-A assessment?

	Number of people participating (1)
General practitioner (1)	
Nurse practitioner/practice nurse (2)	
Practice manager (4)	
Aboriginal health practitioner/worker (7)	
Allied health (3)	
Receptionist/ administration (5)	
Other (6)	

3. Did a HCH practice facilitator from a Primary Health Network assist the practice in the reaching consensus on the assessment?

- Yes (1)
- No (2)

4. Do you wish to submit the results of this survey now? If you wish to finalise and submit the survey data, select Yes below, then select the Next Arrow below. This will submit your data, If you wish to return to this survey later, do not select Yes. Just leave this page and return later using the URL link supplied. The details you have entered above will be saved, and when you return, you can complete the survey.

- Yes (4)

Health Care Homes program practice survey – Round 2

This survey asks questions about the implementation of the Health Care Homes (HCH) program in your primary care practice/ service.

A link has been provided to the survey. You may return to this link on several occasions. The survey should be completed by 30 November 2018 (Round 2).

The information that you provide will be kept strictly confidential and will not be used for any other purpose other than the evaluation of the HCH program. All reports of the evaluation will only contain descriptive information about individual practices/ services (e.g. geographic location in summary categories such as rural, remote, very remote). No ratings or views will be attributed to any individual practice/ service.

The evaluation is being conducted by Health Policy Analysis, on behalf of the Commonwealth Department of Health. If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

The HCH evaluation has been approved by the Department of Health Human Research Ethics Committee Project 04-2017 – Health Care Homes Program, Part A: National Evaluation. If you have any concerns or complaints on the ethical conduct of this research, please contact the Committee Secretariat by email at ethics@health.gov.au. The issue will then be referred to the Chair of the Committee.

If you have any questions regarding the HCH program, please contact healthcarehomes@health.gov.au.

The following questions are about the risk stratification and patient enrolment processes for the HCH program

1. Did your practice/ service decide at the outset to only enroll patients in HCH with specific chronic illnesses (e.g. diabetes or chronic kidney disease)?

    - ☐ 1 No
    - ☐ 2 Yes. Which chronic illnesses did the practice/service focus on?

2. How do you rate the ease of use of the risk stratification software and associated processes?

    - ☐ 1 The process operated very smoothly
    - ☐ 2 We had some challenges, but we overcame them
    - ☐ 3 We experienced ongoing difficulties

The risk stratification process involves two stages:

A. A predictive risk model (PRM) is run over the practice's/ service's data to identify patients that are potentially eligible for HCH.

B. The patient is assessed using the HARP tool. The assessment determines whether the patient can be enrolled, and if so, assigns a risk tier.

3. In your practice/ service, how well did the risk stratification tool identify patients suitable for enrollment in HCH (i.e. Stage A)?

    - ☐ 1 Very well
    - ☐ 2 Moderately well
    - ☐ 3 Average
    - ☐ 4 Poor
    - ☐ 5 Can't say/don't know

4. If the risk stratification process in Stage A fails to flag a patient that the GP feels should have been flagged, there is an override function allowing that patient to be selected and tested for eligibility. Did you practice/service use this function?

    - ☐ 1 No
    - ☐ 2 Yes. What were the main clinical or psycho-social characteristics or other risk factors of patients that prompted you to use this function?

5. What were the main factors that led your practice/ service to decide not to approach some of the patients flagged as potentially eligible for HCH at Stage A of the risk stratification process described above?

6. In your practice, who mainly did the HARP assessments (Stage B of the risk stratification process described above)?

- 1 GP
- 2 Nurse practitioner/remote area nurse
- 3 Practice nurse
- 4 Other
- 5 Combination

7. In your assessment, did patients mostly end up in the right HCH Tier?

- 1 Yes
- 2 No. Can you describe why you believe patients didn't end up in the right Tier?

8. Other than assigning patients to a HCH Tier, how useful was the HARP tool for assessing the care needs of patients?

- 1 Very useful
- 2 Moderately useful
- 3 Limited
- 4 Not useful
- 5 Can't say/don't know

9. Please describe how the assignment to Tiers could be improved. For example, are there any additional clinical or psycho-social characteristics of patients or other risk factors that should be considered in the HARP tool? Should some factors that the HARP tool includes be downplayed?

10. Are there any other ways in which the risk stratification software and associated processes could be improved?

11. Of the patients you approached to join HCH, what percentage would you estimate actually enrolled? Enter a number between 0 and 100:

12. What were the main (up to three) reasons why patients you approached to enroll in the HCH program opted not to?

1.
2.
3.

13. How would you rate the administrative processes for enrolling patients into the HCH program?

- 1 The processes were very smooth
- 2 We had some challenges, but we overcame them
- 3 We experienced ongoing difficulties

14. How could the enrolment process be improved?

The following questions are about shared care planning for HCH patients.

15. Did processes for shared care planning and review change from prior to the HCH implementation?

- ☐ 1 Yes
- ☐ 2 No

15a. Briefly describe the main ways in which shared care planning and review processes changed following the HCH implementation?

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16. How are care plans shared with the patient and carer/family? Select more than one if applicable.

- ☐ 1 We give a printed version of the care plan to the patient and/or their carer/ family.
- ☐ 2 We email an electronic version of the care plan to the patient and/or their carer/ family.
- ☐ 3 We give the patient and/ or their carer/ family access to the care plan via a patient portal or through shared care planning software.
- ☐ 4 We load the patient's care plan into their My Health Record.
- ☐ 5 Other. Please describe:

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17. How useful has My Health Record been for sharing care plans with patients and/ or their carer/ family?

- ☐ 1 Very useful
- ☐ 2 Moderately useful
- ☐ 3 Limited
- ☐ 4 Not useful
- ☐ 5 Can't say/don't know

18. What are the main ways in which you share care plans with clinicians outside the practice/ service involved in the care of the patient? Choose more than one option, if it applies.

- ☐ 1 We send a paper version of the shared care plan to relevant clinicians.
- ☐ 2 We email an electronic copy of the plan to relevant clinicians.
- ☐ 3 Clinicians outside of the practice/ service can access a patient's plan by logging into a common shared care planning software application.
- ☐ 4 We load the plan into the patient's My Health Record.
- ☐ 5 Other. Please describe:

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19. What shared care planning software do you use or decided to use? Choose more than one option, if it applies.

- ☐ 1 cdmNet Coordinated Care Platform (Precedence Health Care)
- ☐ 2 Extensia
- ☐ 3 LinkedEHR
- ☐ 4 Livecare Australia
- ☐ 5 ManageMyHealth (Medtech Global)
- ☐ 6 MyCareManager Client (MCM) Application (Telstra Health)
- ☐ 7 Visual Outcomes
- ☐ 5 Other. Please list the product (and vendor if known).

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20. How easy was it to use My Health Record for sharing care plans with other clinicians outside the practice/ service?

- ☐ 1 Very easy
- ☐ 2 Easy
- ☐ 3 Neutral
- ☐ 4 Difficult

☐ 5 Very difficult

The following questions are about patient activation tools and changes in patient activation. By 'activation' tools we mean tools to assess patients' self-reported knowledge, skills, and confidence to self-manage their health or chronic condition. An example is the Patient Activation Measure (PAM).

21. Do clinical staff in the practice use a standardised tool to assess the level of patient engagement/ activation? If yes, what is the name of the tool?

☐ 1 No
☐ 2 Yes. What is the tool?

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22. The following is a list of some changes that practices/ services have described as part of the HCH implementation. Can you indicate whether these were features of your practice/ service that were in place before you started participating in HCH, and if not whether this is a change you are planning to make during the HCH trial?

Changes made following HCH implementation	22.1 Feature of practice prior to HCH		22.2 Will be a change you are planning to make		
	1 Yes	2 No	1 We are implementing this now	2. We plan to implement this by Dec 2019	3 This won't be a focus for us during the trial
A. Improving the completeness and quality of the data in the practice clinical management system	☐		☐	☐	☐
B. Regular meetings of HCH practice team (e.g. GPs, nurse, admin staff) to review HCH patients and their care needs	☐		☐	☐	☐
C. Reassigning components of care usually undertaken by a GP to a nurse (e.g. patients routinely see a nurse prior to seeing the GP when they attend the practice)	☐		☐	☐	☐
D. Reassigning components of care usually undertaken by a GP or nurse to a medical assistant (e.g. clinical measurements and assessments)	☐		☐	☐	☐
E. Introducing new roles within the practice (e.g. medical practice assistance, care coordinator, community care worker)	☐		☐	☐	☐
F. Improved systems for follow-up and re-call of HCH patients (e.g. for review or preventive services)	☐		☐	☐	☐
G. Proactive contact with patients to check how they are going (e.g. by telephone)	☐		☐	☐	☐
H. Dedicated clinics for HCH patients with specific chronic illnesses (e.g. diabetes, osteoarthritis)	☐		☐	☐	☐
I. Group consultations involving two or more patients	☐		☐	☐	☐
J. Joint consultations for a patient involving a GP, nurse and allied health (e.g. pharmacist)	☐		☐	☐	☐
K. HCH patients able to telephone the practice and talk to a nurse or GP about their health concerns	☐		☐	☐	☐
L. HCH patients able to communicate by email or secure messaging with the GP or nurse about their health concerns	☐		☐	☐	☐

Changes made following HCH implementation	22.1 Feature of practice prior to HCH		22.2 Will be a change you are planning to make		
	1 Yes	2 No	1 We are implementing this now	2. We plan to implement this by Dec 2019	3 This won't be a focus for us during the trial
M. Introducing a patient portal through which clinical information is shared with HCH patients	❑		❑	❑	❑
N. HCH patients able to refill scripts without a GP consultation	❑		❑	❑	❑

The following questions are about chronic disease management.

23. Did your practice's/service's processes for providing care for patients with chronic illnesses change from before implementing HCH to after?
    - ❑ 1 Yes
    - ❑ 2 No

23a. If yes to the previous question, please briefly describe the main ways in which the management of chronic diseases has changed following the HCH implementation?

24. What are most important improvements in clinical care/ chronic disease management that your practice/ service has decided to focus on as part of the HCH program implementation?

Improvement Number	Description of improvement/initiative/change: Include a name (if you have one) and description of the improvement	Were you working on this improve-ment prior to HCH starting in this practice?	What measures have you identified to track changes occurring from this improvement/initiative change?
		Yes	
1		❑	
2		❑	
3		❑	
4		❑	
5		❑	
6		❑	

25. How would you rate the effectiveness of each of the online training modules there were available to prepare your practice/service for implementing HCH?

Module	1. Very effective	2. Moderately effective	3. A little effective	4. Ineffective	5. Can't say/ don't know
Module 1: Overview of the HCH model	❑	❑	❑	❑	❑
Module 2: Engaged leadership	❑	❑	❑	❑	❑
Module 3: Patient enrolment (incl. risk stratification) and payment processes	❑	❑	❑	❑	❑
Module 4: Data-driven improvement	❑	❑	❑	❑	❑
Module 5: Team-based care	❑	❑	❑	❑	❑
Module 6: Developing and implementing the shared care plan	❑	❑	❑	❑	❑
Module 7: Patient-team partnership	❑	❑	❑	❑	❑
Module 8: Comprehensiveness and care coordination	❑	❑	❑	❑	❑
Module 9: Prompt access to care	❑	❑	❑	❑	❑
Module 10: ???	❑	❑	❑	❑	❑

Module	1. Very effective	2. Moderately effective	3. A little effective	4. Ineffective	5. Can't say/ don't know
Module 11: Population management	❑	❑	❑	❑	❑
Module 12: Quality primary care and the future	❑	❑	❑	❑	❑

26. What are the top three ways in which the **online training modules** could be improved?

1.
2.
3.

27. Did a **practice facilitator** from tour Primary Health Network (PHN) help your practice/service prepare for HCH and/or provide ongoing support for the implementation?

- ❑ 1 Yes
- ❑ 2 No

27a If yes for Q27: How would you rate the effectiveness of the support provided by the practice facilitator in helping you prepare for HCH and/ or during the early stages of implementation?

- ❑ 1 Very effective
- ❑ 2 Moderately effective
- ❑ 3 A little effective
- ❑ 4 Not effective
- ❑ 5 Can't say/ don't know

27b. If yes for Q27: What are the top three ways in which the support provided by the practice facilitator towards implementing HCH could be improved?

1.
2.
3.

28. In preparing for HCH implementation, your Primary Health Network (PHN) may have organised a training workshop for practice staff. Did staff from your practice participate in any training workshops organised by the PHN?

- ❑ 1 Yes
- ❑ 2 No

28a If yes for Q28: How would you rate the training workshops provided by you PHN in helping your practice prepare for implementing HCH?

- ❑ 1 Very effective
- ❑ 2 Moderately effective
- ❑ 3 A little effective
- ❑ 4 Not effective
- ❑ 5 Can't say/ don't know

29. If yes for Q28: What are the top ways (up to three) in which training provided by your PHN to implement HCH could be improved?

1.
2.
3.

30. Knowing what you know now about transforming your practice to a HCH, how would you rate the effectiveness of the training and support provided to your practice/ service by all sources (including through the online training modules and your PHN)?

- 1 Very effective
- 2 Moderately effective
- 3 A little effective
- 4 Not effective
- 5 Can't say/ don't know

31. Is there a pharmacist who visits/ works in your practice/ service?

- 1 Yes
- 2 No

31a. If yes to 31, what relationship does this pharmacist have with your practice/ service?

- 1 Pharmacist employed by the practice
- 2 Community pharmacist who works closely with the practice
- 3 Pharmacist supported under another arrangement (e.g. hospital clinical pharmacist integrated with/ visiting the practice)
- 4 Other. Please describe

32. Is there something else you would like to add about where you have got to with implementing HCH in your practice, or any other comments that you would like to make?

Health Care Homes program practice survey – Round 4

This survey asks questions about the implementation of the Health Care Homes (HCH) program in your primary care practice/ service.

A link has been provided to the survey. You may return to this link on several occasions. The survey should be completed by 30 November 2019.

The information that you provide will be kept strictly confidential and will not be used for any other purpose other than the evaluation of the HCH program. All reports of the evaluation will only contain descriptive information about individual practices/ services (e.g. geographic location in summary categories such as rural, remote, very remote). No ratings or views will be attributed to any individual practice/ service.

The evaluation is being conducted by Health Policy Analysis, on behalf of the Commonwealth Department of Health. If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

The evaluation of HCH was approved by the Department of Health Human Research Ethics Committee [Project 04-2017] in September 2017. This committee subsequently disbanded, and in September 2018, ethical oversight for the evaluation was transferred to the ACT Health Human Research Ethics Committee. Concerns or complaints about the ethical conduct of the evaluation should be made in writing to the ACT Health Human Research Ethics Office (ethics@act.gov.au).

If you have any questions regarding the HCH program, please contact healthcarehomes@health.gov.au.

1. In the survey conducted in late 2018, your practice answered questions about the risk stratification process for HCH. Could you outline any further reflections (since the previous survey) on ways in which the risk stratification software and associated processes could be improved?

2. In the survey conducted in late 2018, your practice answered questions about the processes for enrolling patients into the HCH program. Could you outline any further reflections (since the previous survey) on ways in which the enrolment process could be improved?

---

3. In the survey conducted in late 2018, your practice indicated that you were using the shared care planning software listed below. Could you update your response to indicate the software you are currently using? Choose more than one option, if it applies:

   - ☐ 1 cdmNet Coordinated Care Platform (Precedence Health Care)
   - ☐ 2 Extensia
   - ☐ 3 LinkedEHR
   - ☐ 4 Livecare Australia
   - ☐ 5 ManageMyHealth (Medtech Global)
   - ☐ 6 MyCareManager Client (MCM) Application (Telstra Health)
   - ☐ 7 Visual Outcomes
   - ☐ 8 Other. Please list the product (and vendor if known).

4. Could you outline any further reflections (since the previous survey) on ways in which shared care planning has worked for your practice.

---

5. Do you have any further insights into how shared care planning could be improved?

---

6. How useful has My Health Record been in sharing information about HCH patients with other service providers?

- 1 Very useful
- 2 Moderately useful
- 3 Limited
- 4 Not useful
- 5 Can't say/don't know

7. Since the start of the HCH program, how has the use of My Health Record changed for GPs and other clinicians in you practice/service for HCH patients?

- 1 Significant increase
- 2 Moderate increase
- 3 Much the same
- 4 Decreased
- 5 Can't say/don't know

8. Since the start of the HCH program, what is your assessment of changes in the levels of engagement/ activation for HCH patients at this practice/ service?

- 1 Significant improvement in the level of engagement/activation of patients
- 2 Moderate improvement in the level of engagement/activation of patients
- 3 Small improvement in the level of engagement/activation of patients
- 4 No improvement/reduction in the level of engagement/activation of patients
- 5 Can't say/don't know

9. What have been the (up to) top three factors that have contributed improvements in the level of engagement/ activation of HCH patients at you practice/service?

1.
2.
3.

10. What have been the (up to) top three factors that have prevented or limited improvements in the level of engagement/ activation for HCH patients at your practice/service?

1.
2.
3.

33. The following is a list of initiatives that practices/ services have implemented as part of HCH. In the HCH survey conducted in late 2018, your practice identified whether these were features of your practice/ service that were in place before you started participating in HCH, and if not, whether this is a change you are planning to make during the trial? Could you review and update your responses? Could you also assess your progress towards completing these changes for HCH patients.

Initiative	22.1 Feature of practice prior to HCH		22.2 Will this be a change you are planning to make?			22.3 What is your assessment of the extent to which this change has been implemented for your HCH patients as at November 2019?			
	1 Yes	2 No	1 We are implement-ing this now	2. We plan to implement this by Dec 2019	3 This won't be a focus for us during the trial	Completed change	Good progress	Limited progress	No progress
A. Improving the completeness and quality of the data in the practice clinical management system									
B. Regular meetings of HCH practice team (e.g. GPs, nurse, admin staff) to review HCH patients and their care needs									
C. Reassigning components of care usually undertaken by a GP to a nurse (e.g. patients routinely see a nurse prior to seeing the GP when they attend the practice)									
D. Reassigning components of care usually undertaken by a GP or nurse to a medical assistant (e.g. clinical measurements and assessments)									
E. Introducing new roles within the practice (e.g. medical practice assistance, care coordinator, community care worker)									
F. Improved systems for follow-up and re-call of HCH patients (e.g. for review or preventive services)									
G. Proactive contact with patients to check how they are going (e.g. by telephone)									
H. Dedicated clinics for HCH patients with specific chronic illnesses (e.g. diabetes, osteoarthritis)									
I. Group consultations involving two or more patients									

Initiative	22.1 Feature of practice prior to HCH		22.2 Will this be a change you are planning to make?			22.3 What is your assessment of the extent to which this change has been implemented for your HCH patients as at November 2019?			
	1 Yes	2 No	1 We are implement-ing this now	2. We plan to implement this by Dec 2019	3 This won't be a focus for us during the trial	Completed change	Good progress	Limited progress	No progress
J. Joint consultations for a patient involving a GP, nurse and allied health (e.g. pharmacist)									
K. HCH patients able to telephone the practice and talk to a nurse or GP about their health concerns									
L. HCH patients able to communicate by email or secure messaging with the GP or nurse about their health concerns									
M. Introducing a patient portal through which clinical information is shared with HCH patients									
N. HCH patients able to refill scripts without a GP consultation									

34. Below is the description your practice provided in the last HCH practice survey in late 2018 of the main ways in which your practice/ service has changed its processes for managing patients' chronic illnesses since HCH has been implemented. Can you describe any additional changes that have occurred in the last 12 months, or provide an update on the change you described in late 2018?

Response late 2018:	
Update November 2019:	

35. In the survey in late 2018, you listed the improvements in clinical care/ chronic disease management that your practice/ service decided to focus on as part of the HCH program implementation. These are listed below. Could update this response and also assess your progress towards completing these changes for your HCH patients.

#	39A Description of improvement/initiative/change: Include a name (if you have one) and description of the improvement	39B Were you working on this improvement prior to HCH starting in this practice?	39C What measures have you identified to track changes occurring from this improvement/initiative change?	39D What is your assessment of the progress for improvement/initiative/change as at November 2019 for your HCH patients			
		Yes		Completed implementation	Good progress	Limited progress	No progress
1							
2							
3							
4							
5							
6							

The following questions are about some of the financial impacts of HCH on you practice.

Initial establishment of HCH in this practice

36. Could you estimate the total time (in days) associated with preparing for and implementing the HCH program at your practice?

Staff directly involved with implementation	Pre HCH contract activities	Initial preparation	Training and development	Evaluation activities	Other
	Days				
General practitioners					
Practice nurses/Nurses					
Medical practice assistant					
Aboriginal health practitioner					
Other clinical (please specify)					
Reception					
Other administrative staff					
Practice manager					

Pre HCH contract activities: Preparation of initial HCH application, contract negotiation and finalisation.

Initial preparation: Practice discussions/staff meetings, initial development of administrative processes for HCH, meetings with PHN practice facilitator, implementation of risk stratification software, implementation of shared care software.

Training and development: Online training modules, attending training workshops, one-on-one training with PHN practice facilitator, participating in community of practice meetings.

Evaluation activities: Completion of the HCH-A tool, completing practice and staff surveys, participating in interviews with HCH evaluators, other data collection associated with the evaluation.

37. Please describe what types of activities you have included under "other":

Patient enrolment

38. Could you estimate the average time (in minutes) per patient associated with enrolling patients in the HCH program for the following staff?

Staff directly involved with clinical care of HCH patients	Initial consultation with patient	Enrollment process and HARP assessment	Preparation of care plan	HCH Evaluation activities	Other
	Minutes per patient:				
General practitioner					
Practice nurse					
Medical practice assistant					
Aboriginal health practitioner					
Other clinical (please specify)					
Reception					
Other administrative staff					
Practice manager					

Ongoing staff time

39. For the most recent week starting on a Monday and ending on a Sunday, could you estimate the number of activities related to HCH patients enrolled at your practice. Can you also estimate average, minimum and maximum the amount of patient attributable time (see definition below) associated with these activities?

Notes: We recognise estimating the above may be challenging and is likely to require consultation with staff involved with these activities. We ask that you provide your best estimate available to you. This may require judgements/estimated made by the staff involved.

Include only staff for which your practice is financially responsible (i.e. exclude visiting staff).

Patient attributable time includes direct face-to-face contact plus other time related to this, such as writing patient notes, reviewing results, reviewing a care plan.

Staff directly involved with clinical care of HCH patients	Patient activities in most recent week	Was this about average, lower or higher than average compared with other weeks?	Please estimate the patient attributable time in minutes per activity		
			Average	Minimum	Maximum
General practitioners:					
a. Face-to-face consultations					
b. Tele consultations/ contacts					
c. Email consultations/ contacts					
d. Case conference/team meeting related to several HCH patients					
Practice nurses:					
a. Face-to-face consultations					
b. Tele consultations/ contacts					
c. Email consultations/ contacts					
d. Case conference/team meeting related to several HCH patients					
Medical practice assistant:					
a. Face-to-face consultations					
b. Tele consultations/ contacts					
c. Email consultations/ contacts					
d. Case conference/team meeting related to several HCH patients					
Aboriginal health practitioner:					
a. Face-to-face consultations					
b. Tele consultations/ contacts					
c. Email consultations/ contacts					
d. Case conference/team meeting related to several HCH patients					
Other (please specify):					
a. Face-to-face consultations					
b. Tele consultations/ contacts					
c. Email consultations/ contacts					
d. Case conference/team meeting related to several HCH patients					

40. For the most recent week starting on a Monday and ending on a Sunday, could you estimate the time (in minutes) support staff, including receptionists and other administrative staff and practice managers devoted to activities related to HCH patients?

Support staff	Minutes related to HCH patients	Was this about average, lower or higher than average compared with other weeks?
Reception		
Practice managers		
Other administrative staff		

41. Can you describe the approach to co-payments the practice/service has taken for patients enrolled in the HCH program?

Benchmarking reports

Health Policy Analysis/ the Centre for Big Data in Health Research (UNSW) has been distributing reports profiling HCH patients within each practice/ service and comparing them with other practices/ services.

42. How useful were these reports?

- 1 Very useful
- 2 Moderately useful
- 3 Limited
- 4 Not useful
- 5 Our practice/ service did not receive any benchmarking reports
- 6 Can't say/don't know

43. How could the reports be made more useful for your practice (e.g. frequency, content, comparisons)?

Health Care Homes program practice survey – Round 5

This survey asks questions about the implementation of the Health Care Homes (HCH) program in your primary care practice/ service.

A link has been provided to the survey. You may return to this link on several occasions. The survey should be completed by 30 November 2020 (Round 5).

The information that you provide will be kept strictly confidential and will not be used for any other purpose other than the evaluation of the HCH program. All reports of the evaluation will only contain descriptive information about individual practices/ services (e.g. geographic location in summary categories such as rural, remote, very remote). No ratings or views will be attributed to any individual practice/ service.

The evaluation is being conducted by Health Policy Analysis, on behalf of the Commonwealth Department of Health. If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

The evaluation of HCH was approved by the Department of Health Human Research Ethics Committee [Project 04-2017] in September 2017. This committee subsequently disbanded, and in September 2018, ethical oversight for the evaluation was transferred to the ACT Health Human Research Ethics Committee. Concerns or complaints about the ethical conduct of the evaluation should be made in writing to the ACT Health Human Research Ethics Office (ethics@act.gov.au).

If you have any questions regarding the HCH program, please contact healthcarehomes@health.gov.au.

1. In the survey conducted in late 2019, your practice indicated that you were using the shared care planning software listed below. Could you update your response to indicate the software you are currently using? Choose more than one option, if it applies:

   - ☐ 1 cdmNet Coordinated Care Platform (Precedence Health Care)
   - ☐ 2 Extensia
   - ☐ 3 LinkedEHR
   - ☐ 4 Livecare Australia
   - ☐ 5 ManageMyHealth (Medtech Global)
   - ☐ 6 MyCareManager Client (MCM) Application (Telstra Health)
   - ☐ 7 Visual Outcomes
   - ☐ 8 Other. Please list the product (and vendor if known).

2. Could you outline any further reflections (since the previous survey) on ways in which shared care planning has worked for your practice?

3. Do you have any further insights into how shared care planning could be improved?

4. How useful has My Health Record been in sharing information about HCH patients with other service providers?

   - ☐ 1 Very useful
   - ☐ 2 Moderately useful
   - ☐ 3 Limited
   - ☐ 4 Not useful
   - ☐ 5 Can't say/don't know

5. Since the start of the HCH program, how has the use of My Health Record changed for GPs and other clinicians in you practice/service for HCH patients?

   - ☐ 1 Significant increase
   - ☐ 2 Moderate increase
   - ☐ 3 Much the same
   - ☐ 4 Decreased
   - ☐ 5 Can't say/don't know

6. Since the start of the HCH program, what is your assessment of changes in the levels of engagement/ activation for HCH patients at this practice/ service?

    - 1 Significant improvement in the level of engagement/activation of patients
    - 2 Moderate improvement in the level of engagement/activation of patients
    - 3 Small improvement in the level of engagement/activation of patients
    - 4 No improvement/reduction in the level of engagement/activation of patients
    - 5 Can't say/don't know

7. What have been the (up to) top three factors that have contributed improvements in the level of engagement/ activation of HCH patients at you practice/service?

1.
2.
3.

8. What have been the (up to) top three factors that have prevented or limited improvements in the level of engagement/ activation for HCH patients at your practice/service?

1.
2.
3.

19. The following is a list of initiatives that practices/ services have implemented as part of HCH. In the HCH survey conducted in late 2019, your practice identified whether these were features of your practice/ service that were in place before you started participating in HCH, and if not, whether this is a change you are planning to make during the trial? Could you review and update your responses? Could you also assess your progress towards completing these changes for HCH patients.

Initiative	19.1 Feature of practice prior to HCH		19.2 Will this be a change you are planning to make?			19.3 What is your assessment of the extent to which this change has been implemented for your HCH patients as at November 2020?			
	1 Yes	2 No	1 We are implement-ing this now	2. We plan to implement this by Dec 2020	3 This won't be a focus for us during the trial	Completed change	Good progress	Limited progress	No progress
A. Improving the completeness and quality of the data in the practice clinical management system									
B. Regular meetings of HCH practice team (e.g. GPs, nurse, admin staff) to review HCH patients and their care needs									
C. Reassigning components of care usually undertaken by a GP to a nurse (e.g. patients routinely see a nurse prior to seeing the GP when they attend the practice)									
D. Reassigning components of care usually undertaken by a GP or nurse to a medical assistant (e.g. clinical measurements and assessments)									
E. Introducing new roles within the practice (e.g. medical practice assistance, care coordinator, community care worker)									
F. Improved systems for follow-up and re-call of HCH patients (e.g. for review or preventive services)									
G. Proactive contact with patients to check how they are going (e.g. by telephone)									
H. Dedicated clinics for HCH patients with specific chronic illnesses (e.g. diabetes, osteoarthritis)									
I. Group consultations involving two or more patients									

Initiative	19.1 Feature of practice prior to HCH		19.2 Will this be a change you are planning to make?			19.3 What is your assessment of the extent to which this change has been implemented for your HCH patients as at November 2020?			
	1 Yes	2 No	1 We are implement-ing this now	2. We plan to implement this by Dec 2020	3 This won't be a focus for us during the trial	Completed change	Good progress	Limited progress	No progress
J. Joint consultations for a patient involving a GP, nurse and allied health (e.g. pharmacist)									
K. HCH patients able to telephone the practice and talk to a nurse or GP about their health concerns									
L. HCH patients able to communicate by email or secure messaging with the GP or nurse about their health concerns									
M. Introducing a patient portal through which clinical information is shared with HCH patients									
N. HCH patients able to refill scripts without a GP consultation									

20. Below is the description your practice provided in the last HCH practice survey in late 2019 of the main ways in which your practice/ service has changed its processes for managing patients' chronic illnesses since HCH has been implemented. Can you describe any additional changes that have occurred in the last 12 months, or provide an update on the change you described in late 2019?

Response late 2019:	
Update November 2020:	

21. In the surveys conducted in late 2018 and late 2019, you listed the improvements in clinical care/ chronic disease management that your practice/ service decided to focus on as part of the HCH program implementation. These are listed below. Could update this response and also assess your progress towards completing these changes for your HCH patients.

#	21A Description of improvement/initiative/change: Include a name (if you have one) and description of the improvement	21B Were you working on this improvement prior to HCH starting in this practice?	21C What measures have you identified to track changes occurring from this improvement/initiative change?	21D What is your assessment of the progress for improvement/initiative/change as at November 2020 for your HCH patients			
		Yes		Completed implementation	Good progress	Limited progress	No progress
1							
2							
3							
4							
5							
6							

9. Can you describe the main ways in which coordination of care for HCH patients improved compared with similar patients receiving usual care? Can you also describe, what was the feature of the HCH program that facilitated this relative improvement in coordination of care?

#	9A Improved coordination of care compared to usual care for similar patients	9B Feature of HCH program that facilitated this improvement
1		
2		
3		
4		
5		
6		

10. In your assessment, what has been the overall impact of HCH on coordination of care compared with what would occur under usual care for similar patients?

- □ 1 Significant improvement compared with usual care
- □ 2 Moderate improvement compared with usual care
- □ 3 Small improvement compared with usual care
- □ 4 No improvement compared with usual care
- □ 5 Worse coordination compared with usual care
- □ 6 Can't say/don't know

11. Can you describe the main ways in which quality of care for HCH patients improved compared with similar patients receiving usual care? Can you also describe, what was the feature of the HCH program that facilitated this relative improvement in quality of care?

#	11A Improved quality of care compared to usual care for similar patients	11B Feature of HCH program that facilitated this improvement
1		
2		
3		
4		
5		
6		

12. In your assessment, what has been the overall impact of HCH on quality of care compared with that would occur under usual care for similar patients?

- □ 1 Significant improvement compared with usual care
- □ 2 Moderate improvement compared with usual care
- □ 3 Small improvement compared with usual care
- □ 4 No improvement compared with usual care
- □ 5 Worse quality compared with usual care
- □ 6 Can't say/don't know

13. Can you describe the main ways in which patient outcomes may have been <u>better</u> for HCH patients compared with similar patients receiving usual care? Can you also describe what was the feature of the HCH program that facilitated this relative improvement in outcomes?

#	13A Better outcomes compared to usual care for similar patients	13B Feature of HCH program that facilitated this improvement
1		
2		
3		
4		
5		
6		

14. Can you describe the main ways, if any, in which patient outcomes may have been worse for HCH patients compared with similar patients receiving usual care from your practice? Can you also describe, what was the feature of the HCH program that contributed to worse outcomes?

#	XA Worse outcomes compared to usual care for similar patients	XB Feature of HCH program that contributed to worse outcomes
1		
2		
3		
4		
5		
6		

15. In your assessment, what has been the overall impact of HCH on the outcomes for HCH patients, compared with outcomes that would occur under usual care for similar patients?

- 1 Significant improvement compared with usual care
- 2 Moderate improvement compared with usual care
- 3 Small improvement compared with usual care
- 4 No improvement compared with usual care
- 5 Worse outcomes compared with usual care
- 5 Can't say/don't know

16. Can you describe the main ways in which staff experience and satisfaction has improved under the HCH program? Can you also describe, what was the feature of the HCH program that facilitated this relative improvement in staff experience and satisfaction?

#	16A Improved staff experience and satisfaction	16B Feature of HCH program that facilitated this improvement
1		
2		
3		
4		
5		
6		

17. In your assessment, what has been the overall impact of HCH on staff experience and satisfaction?

- 1 Significant improvement compared with usual care
- 2 Moderate improvement compared with usual care
- 3 Small improvement compared with usual care
- 4 No improvement compared with usual care
- 5 Worse quality compared with usual care
- 6 Can't say/don't know

The following questions will assist us to evaluate the financial impacts of HCH for you practice.

18. In the baseline practice survey (conducted in late 2017), you provided the following information about how many staff were employed in the practice/ service, by the type of staff? Please review these responses and update if necessary.

	Head count (1)	Full-time equivalent (FTE) (2)	Vacancies (FTE) (3)
General medical practitioners, please provide additional details in Question 9 below (1)			
General practice registrar/advanced trainee (4)			
Other medical practitioner, please specify (6)			
Nurse practitioner (Registered nurse) (7)			
Remote area nurse (Registered nurse) (8)			
Practice nurse (Registered nurse) (9)			
Practice nurse (Enrolled nurse) (10)			
Nursing assistant/Assistant in Nursing (11)			

	Head count (1)	Full-time equivalent (FTE) (2)	Vacancies (FTE) (3)
Aboriginal Health Practitioner (12)			
Medical practice assistant (13)			
Allied health (23)			
Allied health assistant (24)			
Practice manager (25)			
Receptionist/ Administrative staff (26)			
Other. Please specify: (27)			

19. In the baseline practice survey (conducted in late 2017), you provided the following information about GPs who work in the practice/ service. Please review these responses and update if necessary.

	GPs		GPs participating in the HCH program	Comment (if required)
	Head count (1)	Full-time equivalent (FTE) (2)	Head count (3)	
Owner/ partner				
Salaried				
Contract				
Other				

20. Did you employ addition staff as a result of implementing HCH?

- 1 No
- 2 Yes, please describe

21. What was the approximate average monthly expenditure of the practice/service excluding salaries/payments made to GPs?

Expenditure type	Average monthly expenditure $ (1)
Employee related expenditures for personnel EXCLUDING GPs (salaries, on-costs and contractor payments if appropriate) (1)	
Other operating costs including administrative costs (e.g. legal and audit, computer, meeting expenses, travel), utilities, clinical supplies and clinical services (e.g. sterilization, diagnostic tests, examination material, medications), corporate services charges, building and maintenance expenses (2)	
Depreciation (estimate based on last financial year)	

22. Please describe any changes in the approach your practice/service has taken regarding co-payments for patients enrolled in the HCH program?

23. Overall how would describe the impact of HCH on the financial viability of the practice?

24. Does your practices wish to continue to participate in a program like HCH?

- 1 Yes
- 2 Maybe
- 3 No

25. What are the three most important factors that would influence a decision to continue to participate in a program like HCH?

1.
2.
3.

26. If your practice/ service was to continue in the program, is there potential for more GPs in the practice to participate in HCH?

- 1 Yes – most GPs who are not participating are interested in participating
- 2 Yes – some GPs who are not participating are interested in participating
- 3 No – all GPs are currently participating
- 4 No – Non-participating GPs are not interested, or it would not be appropriate to have them participate in the program

27. If your practice/ service were to continue in the program, is there potential for more patients at the practice to be enrolled into an HCH-like arrangements?

- 1 Yes
- 2 Maybe
- 3 No

28. Please provide any further comments you like to make about the HCH and the impact this has had for patients or for your practice/ service.

Health Care Homes program practice survey - Round 5 Part B

This survey is Part B of the Practice Survey for Round 5 of the Health Care Homes (HCH) program evaluation. It relates to the results of applying the HCH-A tool. The process for applying the HCH-A tool has been described elsewhere. This involves several staff within a practice completing the HCH-A assessment separately, followed by discussion to reach a consensus on scores for each item. The survey relates only to the final consensus score for the practice. There are also a few questions about how the HCH-A tool was applied in the practice/service

A link has been provided to the survey. You may return to this link on several occasions. The survey should be completed by 30 November 2020.

The information that you provide will be kept strictly confidential, and will not be used for any other purpose other than the evaluation of the HCH program. All reports of the evaluation will only contain descriptive information about individual practices/ services (e.g. geographic location in summary categories such as rural, remote, very remote). No ratings or views requested through this survey will be attributed to any individual practice/ service.

The evaluation is being conducted by Health Policy Analysis, on behalf of the Commonwealth Department of Health. If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

The evaluation of HCH was approved by the Department of Health Human Research Ethics Committee [Project 04-2017] in September 2017. This committee subsequently disbanded, and in September 2018, ethical oversight for the evaluation was transferred to the ACT Health Human Research Ethics Committee. Concerns or complaints about the ethical conduct of the evaluation should be made in writing to the ACT Health Human Research Ethics Office (ethics@act.gov.au).

If you have any questions regarding the HCH program, please contact healthcarehomes@health.gov.au.

1. Please enter the final consensus score agreed for each item of the HCH-A tool, following discussion by practice/service staff as at November 2020 (or near to this date). Can you also review and update (if necessary) the consensus score provided when the HCH-A assessment was undertaken close to the commencement of the HCH program in your practice/services

Question	Score November 2020	Review estimated score at around HCH commencement
Q01		
Q02		
Q03		
Q04		
Q05		
Q06		
Q07		
Q08		
Q09		
Q10		
Q11		
Q12		
Q13		
Q14		
Q15		
Q16		
Q17		
Q18		
Q19		
Q20		
Q21		
Q22		
Q23		
Q24		
Q25		

Question	Score November 2020	Review estimated score at around HCH commencement
Q26		
Q27		
Q28		
Q29		
Q30		
Q31		
Q32		
Q33		
Q34		
Q35		
Q36		

2. How many people participated in the HCH-A assessment?

	Number of people participating (1)
General practitioner (1)	
Nurse practitioner/practice nurse (2)	
Practice manager (4)	
Aboriginal health practitioner/worker (7)	
Allied health (3)	
Receptionist/ administration (5)	
Other (6)	

3. Did a HCH practice facilitator from a Primary Health Network assist the practice in the reaching consensus on the assessment?

- Yes (1)
- No (2)

4. Do you wish to submit the results of this survey now? If you wish to finalise and submit the survey data, select Yes below, then select the Next Arrow. This will submit your data, If you wish to return to this survey later, do not select Yes. Just leave this page and return later using the URL link supplied. The details you have entered above will be saved, and when you return, you can complete the survey.

Yes (4)

Appendix D – Practice staff survey

Health care homes program practice staff survey – Round 1 and Round 5

This survey asks questions about your experiences as a member of staff of the primary care practice/ service, which is participating in the Health Care Homes (HCH) program. There are also a few questions about you, to help us interpret your responses. The survey will take 15-20 minutes to complete.

The information that you provide will be kept strictly confidential, and will not be used for any purpose other than the evaluation of the Health Care Homes program. Your response to this survey is anonymous, and the practice/ service in which you work will not be identified in any reports.

The evaluation is being conducted by Health Policy Analysis on behalf of the Commonwealth Department of Health. If you have any questions regarding the HCH program, please contact healthcarehomes@health.gov.au. If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

The evaluation of HCH was approved by the Department of Health Human Research Ethics Committee [Project 04-2017] in September 2017. This committee subsequently disbanded, and in September 2018, ethical oversight for the evaluation was transferred to the ACT Health Human Research Ethics Committee. Concerns or complaints about the ethical conduct of the evaluation should be made in writing to the ACT Health Human Research Ethics Office (ethics@act.gov.au).

Answer each question based on your experience or opinion, related to the primary care practice/ service in which you currently work. Your answers should reflect your experiences of the 12 months prior to the commencement of the HCH program. If you have not been working at the practice/ service for 12 months, give your opinion based on your experience since you commenced employment.

Unless otherwise marked, questions will be asked in both the Round 1 and Round 5 surveys.

1. What is your role in the practice/ service?

- ☐ General practitioner, including GP registrar (1)
- ☐ Practice nurse/Nurse Practitioner (2)
- ☐ Practice manager 5)
- ☐ Nurse assistant/Assistant in nursing (10)
- ☐ Aboriginal health worker/practitioner (4)
- ☐ Medical practice assistant (11)
- ☐ Allied health professional (3)
- ☐ Allied health assistant (21)
- ☐ Receptionist (6)
- ☐ Other administration (7)
- ☐ Other, please specify: (20)

_____

2. If you answered General practitioner to Q1 What best describes your role as a general practitioner?

- ☐ General medical practitioner, owner/partner (1)
- ☐ General medical practitioner, salaried (2)
- ☐ General medical practitioner, contract (3)
- ☐ General practice registrar/advanced trainee (4)
- ☐ General medical practitioner, other. Please describe (5)

_____

2.1 If you answered Practice nurse/Nurse Practitioner to Q1: What best describes your role as a Practice nurse/Nurse Practitioner in this practice?

- ☐ Nurse Practitioner (1)
- ☐ Practice Nurse, Registered Nurse (2)
- ☐ Practice Nurse, Enrolled Nurse (3)
- ☐ Other. Please describe (4)

_____

2.2 If you are a Nurse Practitioner, are you directly involved in developing general practice management plans for patients at this practice?

- ☐ Yes (1)
- ☐ No (2)

2.3 If you are a Nurse Practitioner, do you also play a role as a Care Coordinator or Case Manager for patients at this practice?

- ☐ Yes (1)
- ☐ No (2)

Display this question:

If 1. What is your role in the practice/ service? = Allied health professional

2.1. If you answered allied health professional to Q1, what best describes the allied health discipline/role that you play in in this practice?

- ☐ Pharmacist (8)
- ☐ Physiotherapist (3)
- ☐ Dietitian (1)
- ☐ Exercise physiologist (2)
- ☐ Psychologist (4)
- ☐ Social worker (5)
- ☐ Audiologist (6)
- ☐ Optometrist (7)
- ☐ Dentist (9)
- ☐ Other, please describe (10)

_____

2.2 As an allied health professional, are you directly involved in developing general practice management plans for patients at this practice?

- ☐ Yes (1)
- ☐ No (2)

2.3 As an allied health professional, do you also play a role as a Care Coordinator or Case Manager for patients at this practice?

- ☐ Yes (1)
- ☐ No (2)

3. As an allied health professional, what employment arrangement do you currently have with the practice/ service?

- Full-time (includes full-time partner) (1)
- Part-time (includes part-time partner) (2)
- Casual (3)
- Locum (4)
- Other, please specify (5)

_____

4. As an allied health professional, how long have you worked at this practice/ service?

- 0-3 months (1)
- 4-12 months (2)
- 1-2 years (3)
- 3-5 years (4)
- 6 years or more (5)

_____

If you are a General practitioner, Practice nurse/Nurse Practitioner, Allied health professional or Aboriginal health worker/practitioner:

The following questions relate to your opinions about care provided at the primary care practice/ service in which you work. Your answers should reflect your experiences of the last 12 months (before the commencement of the HCH program). If you have been working at this practice/ service for less than 12 months, give your opinion based on the time since you started working here.

If you are a Practice manager, Receptionist, or other administrative staff member:

The following questions relate to your opinions about care provided at the primary care practice/ service in which you work. Your answers should reflect your experiences of the last 12 months (before the commencement of the HCH program). If you have been working at this practice/ service for less than 12 months, give your opinion based on the time since you started working here. Please note that although you may not have a clinical role in the practice, your views about processes in the practice are valuable and will contribute to the evaluation. If you feel that you cannot offer an opinion about a specific question, select "Don't Know"

5. The primary care team…

(1) ... is made up of members with clearly defined roles, such as responsibility for patient self-management education, proactive follow up, and resource coordination (1)

- Disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

(2) ...is characterised by collaboration and trust.

- Disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

(3) ... works with patients to help them understand their roles and responsibilities in care

- Disagree (1)

- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

6. The primary care team and patients share responsibilities for managing patients' health.

- Disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

7. How easy/difficult is it for you to use the practice management system (clinical management system) or ancillary systems (care planning application/clinical data audit tool) to do the following for your patients?

(1) Review basic pathology results (1)

- Very easy (1)
- Somewhat easy (2)
- Somewhat difficult (3)
- Very difficult (4)
- Not applicable (5)

(2) Update medication list and drug allergies for patients (2)

- Very easy (1)
- Somewhat easy (2)
- Somewhat difficult (3)
- Very difficult (4)
- Not applicable (5)

(3) Review information from hospital discharge summaries (3)

- Very easy (1)
- Somewhat easy (2)
- Somewhat difficult (3)
- Very difficult (4)
- Not applicable (5)

(4) Review notes about patients (4)

- Very easy (1)
- Somewhat easy (2)
- Somewhat difficult (3)
- Very difficult (4)
- Not applicable (5)

(5) Order new patient pathology tests (5)

- Very easy (1)
- Somewhat easy (2)
- Somewhat difficult (3)
- Very difficult (4)
- Not applicable (5)

(6) Prescribe medications (10)

- Very easy (1)
- Somewhat easy (2)
- Somewhat difficult (3)
- Very difficult (4)
- Not applicable (5)

(7) Communicate electronically with other providers (6)

- Very easy (1)
- Somewhat easy (2)
- Somewhat difficult (3)
- Very difficult (4)
- Not applicable (5)

(8) Send or print after-visit summaries, instructions, educational information for patients (7)

- Very easy (1)
- Somewhat easy (2)
- Somewhat difficult (3)
- Very difficult (4)
- Not applicable (5)

(9) Send or receive messages from patients (8)

- Very easy (1)
- Somewhat easy (2)
- Somewhat difficult (3)
- Very difficult (4)
- Not applicable (5)

(10) Develop a care plan/shared care plan for patients (9)

- Very easy (1)
- Somewhat easy (2)
- Somewhat difficult (3)
- Very difficult (4)
- Not applicable (5)

8. The primary care team uses electronic data to…

a. …identify patients with complex health needs. (1)

- Never (1)
- Rarely (2)
- Some-times (3)
- Usually (4)
- Always (5)
- Don't know (6)

b. …monitor and track patient health indicators and outcomes. (2)

- Never (1)
- Rarely (2)
- Some-times (3)
- Usually (4)
- Always (5)
- Don't know (6)

9. The primary care team uses an electronic health record system or other electronic systems to…

a.…support the documentation of patient needs. (1)

- Never (1)
- Rarely (2)
- Some-times (3)
- Usually (4)
- Always (5)
- Don't know (6)

b.…develop care plans. (2)

- Never (1)
- Rarely (2)
- Some-times (3)
- Usually (4)
- Always (5)
- Don't know (6)

c.…determine clinical outcomes. (3)

- Never (1)
- Rarely (2)
- Some-times (3)
- Usually (4)
- Always (5)
- Don't know (6)

10. The primary care team…

a. …informs patients about any diagnosis in a way that they can understand. (1)

- □ Disagree (1)
- □ Somewhat disagree (2)
- □ Neither agree nor disagree (3)
- □ Somewhat agree (4)
- □ Agree (5)
- □ Don't know (6)

b. …helps patients understand all of the choices for their care. (2)

- □ Disagree (1)
- □ Somewhat disagree (2)
- □ Neither agree nor disagree (3)
- □ Somewhat agree (4)
- □ Agree (5)
- □ Don't know (6)

c. …considers and respects patients' values, beliefs and traditions when recommending treatments. (3)

- □ Disagree (1)
- □ Somewhat disagree (2)
- □ Neither agree nor disagree (3)
- □ Somewhat agree (4)
- □ Agree (5)
- □ Don't know (6)

11. The primary care team…

a. …asks for patients' input when making a plan for their care. (1)

- □ Never (1)
- □ Rarely (2)
- □ Some-times (3)
- □ Usually (4)
- □ Always (5)
- □ Don't know (6)

b. …helps make care plans that patients can follow in their daily life. (2)

- □ Never (1)
- □ Rarely (2)
- □ Some-times (3)
- □ Usually (4)
- □ Always (5)
- □ Don't know (6)

c. …develops care plans that incorporate recommendations from other health care providers that patients see. (3)

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Some-times (3)
- ☐ Usually (4)
- ☐ Always (5)
- ☐ Don't know (6)

12. Someone on the primary care team…

a. …helps patients set goals for managing their health. (1)

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Some-times (3)
- ☐ Usually (4)
- ☐ Always (5)
- ☐ Don't know (6)

b. …checks to see if patients are reaching their goals. (2)

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Some-times (3)
- ☐ Usually (4)
- ☐ Always (5)
- ☐ Don't know (6)

13. The primary care team…

a. …gives patients a copy of their care plan. (1)

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Some-times (3)
- ☐ Usually (4)
- ☐ Always (5)
- ☐ Don't know (6)

b. …follows through with the care plan. (2)

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Some-times (3)
- ☐ Usually (4)
- ☐ Always (5)
- ☐ Don't know (6)

c. …uses patients' care plan to follow progress. (3)

- Never (1)
- Rarely (2)
- Some-times (3)
- Usually (4)
- Always (5)
- Don't know (6)

d. ... reviews and updates patients' care plan with them. (4)

- Never (1)
- Rarely (2)
- Some-times (3)
- Usually (4)
- Always (5)
- Don't know (6)

14. The primary care practice/service...

a. …has behaviour change interventions readily available for patients as part of routine care. (1)

- Disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

b. …has peer support readily available for patients as part of routine care. (2)

- Disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

15. Someone on the primary care team…

a …asks patients about additional supportive services they may need including those that may be available in the practice/service or the community, such as counselling programs, support groups, rehabilitation programs, home care, financial support, equipment and transportation services. (7)

- Disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

b …gives patients information about additional supportive services offered at the practice/ service or in the community, such as counselling programs, support groups, rehabilitation programs, home care, financial support, equipment and transportation services. (1)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

c. …connects patients to needed services in the practice/service or the community, such as counselling programs, support groups, rehabilitation programs, home care, financial support, equipment and transportation services. (3)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

16. When a patient sees a specialist, the primary care team…

a. …is informed about the care patients received from the specialist. (1)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

b. …receives information from the specialist about new prescriptions or if there was a change in medication. (2)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

c. …receives information from the specialist about follow-up care. (3)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

Round 5 only

Display this question:

If 1. What is your role in the practice/ service? = GP

16A. Approximately how many HCH patients that you are responsible for have you referred to a community pharmacist as part of the HCH trial (i.e. for a medication reconciliation and a medication management plan or other support)?

1. All/majority of HCH patients (80-100%)
2. Most HCH patients (50-79%)
3. Some HCH patients (20-49%)
4. No/very few HCH patients (Less than 20%)

Skip to question 16C: If 1 or 2
Display this question: If 3 or 4

16B. What are the key reasons that you have not referred more HCH patients to a community pharmacist as part of the HCH trial?

Skip to question 17

16C. For approximately what proportion of HCH patients that you referred to a community pharmacist have you received a medication management plan from the community pharmacist?

1. All/majority of HCH patients (80-100%)
2. Most HCH patients (50-79%)
3. Some HCH patients (20-49%)
4. No/very few HCH patients (Less than 20%)

16D. Thinking about the community pharmacist with whom you have most dealings, how often have you interacted over the last month? Interaction could be via telephone, video, email or face-to-face.

1. Nil
2. 1-2 times
3. 3-4 times
4. 5-6 times
5. 7 or more times

99. Unknown

Skip to question 16F: If 1
Display this question 2,3,4,5

16E. In any of the interactions with this pharmacist throughout the trial period, did the pharmacist outline supporting services that he/she planned or could deliver to support the patient's achievement of their medication management goals?

1. Yes
2. No
3. Can't say

16F. Can you estimate the proportion of the community pharmacist's recommendations you act on, for example, making changes to a patient's medication regime or following through with a patient's Asthma Action Plan?

Percentage: 0-100%

Skip to question 16H: If response is GT 50%
Display this question: If response is LT 50%

16G. What are your key reasons for not acting on the community pharmacist's recommendations most of the time?

16H. In your opinion, what are the benefits to your patients of the services being provided by community pharmacists that you refer patients to as part of the HCH trial?

16I. Since the start of the community pharmacy component of the HCH trial, have communications between you and community pharmacists in your local area improved?

1. Yes
2. No
3. Can't say

16J. What are top three ways in which community pharmacists' expertise can be better used towards improving the care provided for HCH patients and other patients with chronic illnesses?

(1) _____

(2) _____

(3) _____

17. When patients are discharged from the hospital, the primary care team…

a. …is informed about the care patients received from the hospital. (1)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

b. …receives information from the hospital about new prescriptions or if there was a change in medication. (2)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

c. …receives information from the hospital about post-discharge follow-up care. (3)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

18. When patients are discharged from the hospital and their test results pending, the results are incorporated into their primary care medical record within two weeks:

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Some-times (3)

- ☐ Usually (4)
- ☐ Always (5)
- ☐ Don't know (6)

19. In general, how would rate the coordination of care provided by your primary care practice/ service:

- ☐ Poor (1)
- ☐ Fair(2)
- ☐ Good(3)
- ☐ Very Good(4)
- ☐ Excellent(5)

Round 1 only

20. What are the top changes (up to three) you believe would improve the coordination of care provided for patients of your practice/service?

- ☐ Change 1 (1) _____
- ☐ Change 2 (2) _____
- ☐ Change 3 (3) _____

Round 5 only

20A. Since the HCH program commenced, coordination of care provided for patients of your practice/service:

- ☐ Got better
- ☐ Stayed the same
- ☐ Got worse
- ☐ Not sure

20B. Since the implementation of HCH in you practice, what are the top three changes that have occurred that improved the coordination of care provided for patients of your practice/service?

- ☐ Change 1 (1) _____
- ☐ Change 2 (2) _____
- ☐ Change 3 (3) _____

20C. What are the top changes (up to three) you believe would further improve the coordination of care provided for patients of your practice/service?

- ☐ Change 1 (1) _____
- ☐ Change 2 (2) _____
- ☐ Change 3 (3) _____

21. In general, how would rate the quality of care provided to patients by your primary care practice/ service:

- ☐ Poor (1)
- ☐ Fair(2)
- ☐ Good(3)
- ☐ Very Good(4)
- ☐ Excellent(5)

Round 1 only

22. What are the top changes (up to three) you believe would improve the quality of care provided to patients of your practice/service?

- ☐ Change 1 (1) _____
- ☐ Change 2 (2) _____
- ☐ Change 3 (3) _____

Round 5 only

22A. Since the HCH program started, the quality of care provided for patients of your practice/service:

- ☐ Got better
- ☐ Stayed the same
- ☐ Got worse
- ☐ Not sure

22B. Since the implementation of HCH in you practice, what are the top three changes that have occurred that improved the quality of care provided to patients of your practice/service?

- ☐ Change 1 (1) _____
- ☐ Change 2 (2) _____
- ☐ Change 3 (3) _____

22C. What are the top changes (up to three) you believe would further improve the quality of care provided to patients of your practice/service?

- ☐ Change 1 (1) _____
- ☐ Change 2 (2) _____
- ☐ Change 3 (3) _____

23. Please indicate your level of agreement with the following statements about your job:

My work gives me a feeling of personal accomplishment. (1)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

I have the tools and resources to do my job well. (2)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

My job makes good use of my skills and abilities. (4)

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)

- Don't know (6)

I have clearly defined quality goals. (3)

- Disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

The practice/service leaders visibly demonstrate a commitment to quality. (5)

- Disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

The practice/service leaders keep employees informed about matters affecting us. (6)

- Disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

The practice/service leaders strongly support practice change efforts (7)

- Disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Agree (5)
- Don't know (6)

Round 5 only

The following questions relate to changes that have occurred for you since the implementation of the HCH program in your practice/ service.

23A. Has your role in the practice/ service changed since the implementation of the HCH in your practice?

- ☐ I started work with the practice/ service after the HCH program commenced. Skip to question 24.
- ☐ There have been no changes to my role since the HCH program commenced. Skip to question 24.
- ☐ My role in the practice/ service has changed, but this has not been a result of the HCH program. Skip to question 24.
- ☐ My role in the practice/ service has changed since the HCH program commenced, and this is a result of/ related to the HCH program.

23B. How much of your daily work relates to patients enrolled in the HCH program?

- ☐ None or very little
- ☐ Some of my daily work
- ☐ All of my daily work
- ☐ Not sure/can't say

23C. In what ways has your role in the practice/ service changed the implementation of the HCH in your practice?

a. The depth of my job has increased (e.g. through extending my skills).

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

b. The breadth of my job has been expanded (e.g. wider range of tasks, and/or working with more organisations).

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

c. I now delegate more responsibility to others.

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

d. I now have more responsibility delegated to me.

- ☐ Disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Don't know (6)

23D. Can you briefly describe how your role has changed since the implementation of the HCH in your practice?

23E. How have the following aspects of your job changed, since the implementation of the HCH in your practice?

a. Having clear planned goals and objectives for my job.

- ☐ Better than before the HCH program started
- ☐ No change
- ☐ Worse than before the HCH program started

- ☐ Not sure

b. Having an interesting job.

- ☐ Better than before the HCH program started
- ☐ No change
- ☐ Worse than before the HCH program started
- ☐ Not sure

c. Developing my role

- ☐ Better than before the HCH program started
- ☐ No change
- ☐ Worse than before the HCH program started
- ☐ Not sure

d. Having adequate resources to do my job (e.g. skills, staff, IT, time, etc.).

- ☐ Better than before the HCH program started
- ☐ No change
- ☐ Worse than before the HCH program started
- ☐ Not sure

24. Which number below best describes the atmosphere in your practice?

- ☐ Calm (1)
- ☐ (2)
- ☐ …Bust But reasonable (3)
- ☐ (4)
- ☐ Hectic, chaotic(5)

25. In general, how do rate your satisfaction with your job?

- ☐ Very unsatisfied (1)
- ☐ Unsatisfied (2)
- ☐ Neutral (3)
- ☐ Satisfied (4)
- ☐ Very satisfied (5)

26. What are the top changes (up to three) you believe would improve your satisfaction with your job?

- ☐ Change 1 (1) _____
- ☐ Change 2 (2) _____
- ☐ Change 3 (3) _____

Appendix E – PHN survey

PHN survey: Round 2 Part A

This survey includes questions about the support provided by your Primary Health Network (PHN) to practices/services participating in the Health Care Homes (HCH) Program. This is Part A of the survey, which includes questions about the PHN's perspectives on the challenges and successes during in the initial phase of implementation of the HCH program. Part B focuses on assessments of participating practices against the major dimensions of the HCH-A tool. A link has been provided to the survey. You may return to this link on several occasions. The survey should be completed by 30 April 2018. The information you provide through this survey will be kept strictly confidential and will not be used to any purpose other than the evaluation the HCH program. All reports of the evaluation will only contain description information and individual PHNs. Ratings or views requested through this survey will not be attributed to an individual PHN. Your PHN may be identified in reports provided to the Department of Health.

The evaluation is being conducted by Health Policy Analysis, on behalf of the Commonwealth Department of Health. If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

The HCH evaluation has been approved by the Department of Health Human Research Ethics Committee (Project 04-2017 – Health Care Homes Program, Part A: National Evaluation). If you have any concerns or complaints on the ethical conduct of this research, please contact the Committee Secretariat by email at ethics@health.gov.au.

1. PHN name

2. Who should be contacted if we have any questions about your responses to this survey?

- ☐ Name (1) _____
- ☐ Phone (2) _____
- ☐ Email (3) _____

Governance at PHN level

3. Briefly describe the governance of the HCH implementation within the PHN.

4. Describe the membership of PHN HCH regional governance group.

5. What steps could be taken to improve governance of the HCH program implementation within the PHN?

6. What steps could be taken to improve governance for the HCH program implementation at the national level?

Training, facilitation and support provided by PHN staff to practices to support implementation of HCH

7. Please describe the key elements of the strategy the PHN adopted to provide facilitation, training and support to HCH practices.

8. Please describe the strategies the PHN adopted to support/facilitate HCH practices in the enrolment of patients into the program.

9. Please describe the strategies the PHN adopted to support/facilitate HCH practices in the other aspects of implementation of the HCH model.

10. Please describe strategies the PHN adopted to provide opportunities for HCH key change drivers, including practice managers and principals, to engage and establish communities of practice at a regional level.

11. Did the PHN provide any training workshops/webinars in which HCH practices participated?

- ☐ Yes (4)
- ☐ No (5)

11a. If you answered yes to Q 11, please provide the following details of the training workshop(s)/webinar(s) organised for HCH practices/practice staff related to the HCH program implementation in the format below.

- ☐ Date of workshop/webinar (1) _____
- ☐ What was the focus of the workshop/webinar? (2) _____
- ☐ Duration (hours) (3) _____
- ☐ Number of practice staff attending (4) _____
- ☐ Number HCH practices represented? (5) _____

11b. Was there another training workshop or webinar organised for HCH practices/practice staff?

- ☐ Yes (5) if yes, repeat Q11a for each workshop(s)/webinar(s) organised
- ☐ No (6) if no, move to Q 12

12. Please estimate the average level of support provided to each HCH practice, where the support was provided individually to the practice, using the categories specified below. Support may have occurred through visits to the practice involving face-to-face facilitation, training or support, or through telephone/video conference-based support, or through email contact.

Note: *Exclude facilitation, training or support provided through training workshops, webinars or other group methods which have been described above. Where activity (e.g. a visit) involved an organisation with several practices/clinics participating in the HCH program, estimate the average across practices/clinics rather than the average for the organisation.*

For this question we are asking for your best estimates, rather than requesting a detailed analysis of all contacts/supports undertaken. The estimate could be based on a discussion/consensus reached between PHN practice facilitators and other staff.

	Estimate per practice	
	Prior to HCH commencement in practice (1)	Following HCH commencement in practice (to 30-6-2018) (2)
Estimated average visits per practice (1)		
Estimated average number of telephone/video conference support instances per practice (2)		
Estimated average number of email contacts per practice (4)		
Estimated average PHN staff time (in days) per practice (3)		
Estimated maximum PHN staff time (in days) for any practice (5)		
Estimated minimum PHN staff time (in days) for any practice (6)		

13. Please estimate as percentage, how the level of support varied from the average (equal to 100%) for the following types of practices?

Note: *As an example, if the average amount of PHN staff time for facilitation, training and support was 20% more for a particular category of practice, the response should be 120%. If the average was 20% less that the average, the response should be 80%.*

If there were no HCH practices in these categories within the PHN, leave blank.

	Practice size:			
	Solo practitioner (1)	Small practice (< 5 GPs) (2)	Medium practice (5-8 GPs) (3)	Large Practice (8+ GPs) (4)
GP owned (1)				
Corporate practice (2)				
Clinic operated by ACCHS (3)				

14. What other characteristics of practices impacted the level of input from the PHN for facilitation, training or support?

15. Overall, how would rate the effectiveness of facilitation, training and support provided by the PHN to assist practices in implementing the HCH model?

- ☐ Very effective (1)
- ☐ Moderately effective (2)
- ☐ Limited effectiveness (3)
- ☐ Not effective (4)

16. What are the top three factors that contributed to effective facilitation, training and support provided to HCH practices?

- ☐ Factor 1 (1) _____
- ☐ Factor 2 (2) _____
- ☐ Factor 3 (3) _____

17. What are the top three factors that have made it difficult to provide effective facilitation, training and support to HCH practices?

- ☐ Factor 1 (1) _____
- ☐ Factor 2 (2) _____
- ☐ Factor 3 (3) _____

18. If the HCH program were to be extended to other practices in your PHN, what would be the top three changes to the PHN strategy you would consider to support/facilitate implementation?

- ☐ Change 1 (1) _____
- ☐ Change 2 (2) _____
- ☐ Change 3 (3) _____

National training and support for HCH implementation

19. How effective were the following in **preparing practice facilitators** for their roles?

	Supporting practices to get started with the HCH model (e.g. setting up processes patient enrollment, getting familiar with the risk stratification tool)				Supporting practices in practice transformation (e.g. identifying priorities for change, strengthening team work)			
	Very effective (1)	Somewhat effective (2)	Limited effectiveness (3)	Not effective (4)	Very effective (1)	Somewhat effective (2)	Limited effectiveness (3)	Not effective (4)
HCH online training modules (7)	❑	❑	❑	❑	❑	❑	❑	❑
Practice facilitator workshops. (Consider the practice facilitator workshops as a whole: both workshop 1 and 2), (6)	❑	❑	❑	❑	❑	❑	❑	❑
Practice facilitator coaching webinars (8)	❑	❑	❑	❑	❑	❑	❑	❑
Practice facilitator individual coaching/support from AGPAL National practice facilitator (9)	❑	❑	❑	❑	❑	❑	❑	❑
Practice facilitator teleconferences (10)	❑	❑	❑	❑	❑	❑	❑	❑

20. What are the three top changes to the **HCH online training modules** that would improve their usefulness and effectiveness for practice staff and practices?

❑ Change 1 (1) _____
❑ Change 2 (2) _____
❑ Change 3 (3) _____

21. What are the three top changes to the **practice facilitator workshops** that would improve the development of skills and capabilities of practice facilitators?

❑ Change 1 (1) _____
❑ Change 2 (2) _____
❑ Change 3 (3) _____

22. What are the three top changes to **other support for practice facilitators** (e.g. webinars, coaching, teleconferences), that would improve the development of skills and capabilities of practice facilitators?

❑ Change 1 (1) _____
❑ Change 2 (2) _____
❑ Change 3 (3) _____

Other PHN initiatives

The following relates to other initiatives the PHN has implemented that have been used in the HCH program implementation. Initiatives may be related (but not limited) to:

- improving linkages between primary and other health services
- linking HCH practices into care coordination services commissioned by the PHN
- chronic and complex disease management
- electronic platforms to share patient care plans with other service providers
- quality improvement
- benchmarking
- collaboratives.

Please indicate whether the initiative involves local hospitals or the Local Hospital Network.

23. Were there other PHN initiatives that have been used in the HCH program implementation, such as those listed above?

- ☐ Yes (4) If yes please provide details at Q 24a-g
- ☐ No (5) If no, continue to Q 25

24a. Initiative name

_____

24b. Brief description of initiative

24c. Was the initiative in place prior to the commencement of the HCH program?

- ☐ Yes (1)
- ☐ No (3)
- ☐ Don't know (4)

24d. How many practices participated in the initiative prior to the commencement of the HCH program and at 31 March 2018?

	Number of practices (1)
Prior to HCH commencement (1)	
31 March 2018 (3)	

24e. Does this initiative involve a local hospital, Local Hospital Network (LHN) and/ or state/ territory health authority?

- ☐ Yes (1)
- ☐ No (3)
- ☐ Don't know (4)

24f. In what ways did this initiative contribute to supporting HCH practices and the aims of the HCH program?

_____

24g. How successful has this initiative been in supporting the aims of the HCH program?

- ☐ Very successful (1)
- ☐ Moderately successful (3)
- ☐ Limited success (4)
- ☐ Not successful (5)
- ☐ Can't say (6)

24h. Is there another PHN initiative has been used in the HCH program implementation?

- ☐ Yes (1) please repeat Q 24a-g as many times as necessary
- ☐ No (2) move to Q 25.

PHN staffing and resources

25. Please list the positions specifically assigned to support the implementation of the HCH program and the associated full-time-equivalent (FTE) employed against these positions for the 6-month periods indicated.

	Position name (1)	FTE 2017-18		FTE 2018-19 (Round 4)		FTE 2019-20 (Round 4)
		Jul-Dec 2017 (1)	Jan-Jun 2018 (Round 4) (2)	Jul-Dec 2018 (1)	Jan-Jun 2019 (2)	Jul-Dec 2019 (1)
1 (1)						
2 (2)						
3 (3)						
…						

26. Please estimated the contribution of staff who are indirectly involved in supporting the implementation of HCH (i.e. do not include the staff directly involved in supporting practices listed in the response to the previous question). Express your estimate as full-time equivalent (FTE) staff overall for the PHN.

	FTE 2017-18		FTE 2018-19 (Round 4)		FTE 2019-20 (Round 4)
	Jul-Dec 2017 (1)	Jan-Jun 2018 (2)	Jul-Dec 2018 (1)	Jan-Jun 2019 (2)	Jul-Dec 2019 (1)
1 (1)					
2 (2)					
3 (3)					
…					

27. What else should we know about the size and nature of the PHN effort to support the implementation of the HCH program?

PHN views on other aspect of program implementation

This section asks for PHN feedback on various aspects of the HCH program at the national level.

28. What are the three top changes to patient enrolment processes that should be considered for the next stage of the HCH program implementation?

- ☐ Change 1 (1) _____
- ☐ Change 2 (2) _____
- ☐ Change 3 (3) _____

29. What are the three top changes to risk stratification processes that should be considered for the next stage of the HCH program implementation?

- ☐ Change 1 (1) _____
- ☐ Change 2 (2) _____
- ☐ Change 3 (3) _____

30. Please provide any additional information that is considered important for understanding the HCH program implementation within your PHN.

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31. Do you wish to submit the results of this survey now?

If you wish to finalise and submit the survey data, select Yes below, then select the Next Arrow below. This will submit your data. If you wish to return to this survey later, do not select Yes. Just leave this page and return later using the URL link supplied. The details you have entered above will be saved, and when you return, you can complete the survey. When you return to the survey you will be taken to the first missing response.

- ☐ Yes (4)

PHN survey: Round 2 Part B

This survey includes questions about the support provided by your Primary Health Network (PHN) to practices/services participating in the Health Care Homes (HCH) Program. This is Part B of the survey, in which responses are requested on practice facilitator assessments of participating HCH practices against the major dimensions of the HCH-A tool. This would be typically provided by a practice facilitator or a PHN staff member who has worked closely with the practice. This assessment will provide a means of triangulating the self-assessments conducted by the practices themselves, using HCH-A tool. A link has been provided to the survey. You may return to this link on several occasions. The survey should be completed by 30 April 2018. The information you provide through this survey will be kept strictly confidential and will not be used to any purpose other than the evaluation the CH program. All reports of the evaluation will only contain description information and individual PHNs. Ratings or views requested through this survey will not be attributed to an individual PHN. Your PHN may be identified in reports provided to the Department of Health.

The evaluation is being conducted by Health Policy Analysis, on behalf of the Commonwealth Department of Health. If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

The HCH evaluation has been approved by the Department of Health Human Research Ethics Committee (Project 04-2017 – Health Care Homes Program, Part A: National Evaluation). If you have any concerns or complaints on the ethical conduct of this research, please contact the Committee Secretariat by email at ethics@health.gov.au.

1. PHN name

_____

Practice facilitator assessments of practices

The following question requests an assessment, by practice facilitators, of each HCH practice against the high-level dimensions of the HCH-A tool. The reported scores should reflect the practice facilitator's assessment of the practice at the commencement of the HCH program within the practice. This will allow the practice self-assessment scores to be triangulated and moderated.

2. Practice facilitator assessments of practices on the HCH-A dimensions, at commencement of the HCH program?

#	Practice name (1)	Practice facilitator assessment of practice on high level dimensions of HCH-A: Please enter value between 1 and 12									
		Engaged leadership (1)	Patient enrolment (2)	Quality improvement activities (3)	Continuity of care with nominated GP and team (4)	Teamwork within practice (5)	Care planning and review (6)	Involvement of patients in decision making and care (7)	Self-management support (8)	Linking patients to supportive community based resources (9)	Improved access to primary care services (10)
1											
2											
3											
…											

3. Is there other information that you consider important for the evaluators to be aware of in assessing the implementation of the HCH program in these practices?

	Practice name	Other information that may be important in assessing the implementation of the HCH program
1		
2		
3		
…		

4. Do you wish to submit the results of this survey now?

If you wish to finalise and submit the survey data, select Yes below, then select the Next Arrow below. This will submit your data.

If you wish to return to this survey later, do not select Yes. Just leave this page and return later using the URL link supplied. The details you have entered above will be saved, and when you return, you can complete the survey. When you return to the survey you will be taken to the first missing response.

- ☐ Yes (4)

PHN survey: Round 4

This survey includes questions about the support provided by your Primary Health Network (PHN) to practices/services participating in the Health Care Homes (HCH) Program. This is Part A of the survey, which includes questions about the PHN's perspectives on the challenges and successes during in the initial phase of implementation of the HCH program. Part B focuses on assessments of participating practices using the HCH-A tool. A link has been provided to the survey. You may return to this link on several occasions. The survey should be completed by 30 November 2019. The information you provide through this survey will be kept strictly confidential and will not be used to any purpose other than the evaluation the HCH program. All reports of the evaluation will only contain description information and individual PHNs. Ratings or views requested through this survey will not be attributed to an individual PHN. Your PHN may be identified in reports provided to the Department of Health.

The evaluation is being conducted by Health Policy Analysis, on behalf of the Commonwealth Department of Health. If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

The evaluation of HCH was approved by the Department of Health Human Research Ethics Committee [Project 04-2017] in September 2017. This committee subsequently disbanded, and in September 2018, ethical oversight for the evaluation was transferred to the ACT Health Human Research Ethics Committee. Concerns or complaints about the ethical conduct of the evaluation should be made in writing to the ACT Health Human Research Ethics Office (ethics@act.gov.au).

1. PHN name:

_____

2. Who should be contacted if we have any questions about your responses to this survey?

- ☐ Name (1) _____
- ☐ Phone (2) _____
- ☐ Email (3) _____

Training, facilitation and support provided by PHN staff to practices to support implementation of HCH

3. Did the PHN provide any training workshops/webinars in which HCH practices participated since the last PHN survey, that is, from April 2018 to November 2019?

- ☐ Yes (4)
- ☐ No (5)

3a. If you answered yes to Q3, please provide the following details of the training workshop(s)/webinar(s) organised for HCH practices/practice staff related to the HCH program implementation in the format below.

- ☐ Date of workshop/webinar (1) _____
- ☐ What was the focus of the workshop/webinar? (2) _____
- ☐ Duration (hours) (3) _____
- ☐ Number of practice staff attending (4) _____
- ☐ Number HCH practices represented? (5) _____

3b. Was there any other training workshop or webinar organised for HCH practices/practice staff?

- ☐ Yes (5) if yes, repeat Q3 for each workshop(s)/webinar(s) organised
- ☐ No (6) if no, move to Q4

4. Please estimate the average level of support provided to each HCH practice, where the support was provided individually to the practice, using the categories specified below. Support may have occurred through visits to the practice involving face-to-face facilitation, training or support, or through telephone/video conference-based support, or through email contact.

   Note: *Exclude facilitation, training or support provided through training workshops, webinars or other group methods which have been described above. Where activity (e.g. a visit) involved an organisation with several practices/clinics participating in the HCH program (e.g. a corporate group or an Aboriginal Community Controlled Health Service with multiple clinics), estimate the average across practices/clinics rather than the average for the organisation.*

   For this question we are asking for your best estimates, rather than requesting a detailed analysis of all contacts/supports undertaken. The estimate could be based on a discussion/consensus reached between PHN practice facilitators and other staff.

	Estimate per practice/ service
	I July 2018 to 30 June 2019
Estimated average visits per practice (1)	
Estimated average number of telephone/video conference support instances per practice (2)	
Estimated average number of email contacts per practice (4)	
Estimated average PHN staff time (in days) per practice (3)	
Estimated maximum PHN staff time (in days) for any practice (5)	
Estimated minimum PHN staff time (in days) for any practice (6)	

5. How has the nature of facilitation, training and support provided by the PHN to assist practices in implementing the HCH model change in since mid-2018? Please comment on any changes since the end of the patient enrolment period for HCH.

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6. Please describe any organisational changes that have been made related to staff providing support to HCH practices.

PHN staffing and resources

7. Please list the positions specifically assigned to support the implementation of the HCH program and the associated full-time-equivalent (FTE) employed against these positions for the 6-month periods indicated. The details you provided in the last PHN survey have been shown here. Please review and update if necessary.

#	Position name	2017-18		2018-19		2019-20
		Jul-Dec 2017 FTE	Jan-Jun 2018 FTE	Jul-Dec 2018 FTE	Jan-Jun 2019 FTE	Jul-Dec 2019 FTE
1						
2						
3						
…						

8. Please estimated the contribution of staff who are indirectly involved in supporting the implementation of HCH (i.e. do not include the staff directly involved in supporting practices listed in the response to the previous question). Express your estimate as full-time equivalent (FTE) staff overall for the PHN.

#	Position name	2017-18		2018-19		2019-20
		Jul-Dec 2017 FTE	Jan-Jun 2018 FTE	Jul-Dec 2018 FTE	Jan-Jun 2019 FTE	Jul-Dec 2019 FTE
1						
2						
3						
…						

9. What else should we know about the size and nature of the PHN effort to support the implementation of the HCH program?

PHN views on other aspects of HCH program

10. Please outline any further reflections you have had on the HCH program and its implementation since the previous PHN survey

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Benchmarking reports

11. How useful were the reports that you received from Health Policy Analysis/ the Centre for Big Data in Health Research (UNSW) benchmarking practices within your PHN?

    - 1 Very useful
    - 2 Moderately useful
    - 3 Limited
    - 4 Not useful
    - 5 Can't say/don't know

12. Do you have any suggestions for how to make the reports more useful for your PHN and/ or for practices (e.g. frequency, content, comparisons)?

PHN survey: Round 5

This survey includes questions about the support provided by your Primary Health Network (PHN) to practices/services participating in the Health Care Homes (HCH) Program. This is Part A of the survey, which includes questions about the PHN's perspectives on the challenges and successes during in the initial phase of implementation of the HCH program. Part B focuses on assessments of participating practices using the HCH-A tool. A link has been provided to the survey. You may return to this link on several occasions. The survey should be completed by 30 November 2020. The information you provide through this survey will be kept strictly confidential and will not be used to any purpose other than the evaluation the HCH program. All reports of the evaluation will only contain description information and individual PHNs. Ratings or views requested through this survey will not be attributed to an individual PHN. Your PHN may be identified in reports provided to the Department of Health.

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1. PHN name:

_____

2. Who should be contacted if we have any questions about your responses to this survey?

   ☐ Name (1) _____
   ☐ Phone (2) _____
   ☐ Email (3) _____

Support provided by PHN staff to practices for HCH implementation

3. Please estimate the average level of support provided to each HCH practice, where the support was provided individually to the practice, using the categories specified below. Support may have occurred through visits to the practice involving face-to-face facilitation, training or support, or through telephone/video conference-based support, or through email contact.

   Note: *Exclude facilitation, training or support provided through training workshops, webinars or other group methods which have been described above. Where activity (e.g. a visit) involved an organisation with several practices/clinics participating in the HCH program (e.g. a corporate group or an Aboriginal Community Controlled Health Service with multiple clinics), estimate the average across practices/clinics rather than the average for the organisation.*

   For this question we are asking for your best estimates, rather than requesting a detailed analysis of all contacts/supports undertaken. The estimate could be based on a discussion/consensus reached between PHN practice facilitators and other staff.

	Estimate per practice I July 2019 to 30 June 2020
Estimated average visits per practice (1)	
Estimated average number of telephone/video conference support instances per practice (2)	
Estimated average number of email contacts per practice (4)	
Estimated average PHN staff time (in days) per practice (3)	
Estimated maximum PHN staff time (in days) for any practice (5)	
Estimated minimum PHN staff time (in days) for any practice (6)	

4. How has the nature of facilitation, training and support provided by the PHN to assist practices in implementing the HCH model change in since mid-2019?

5. Please describe any organisational changes that have been made related to staff providing support to HCH practices.

6. Overall, across the course of the program, how would rate the effectiveness of facilitation, training and support provided by the PHN to assist practices in implementing the HCH model?

    - Very effective (1)
    - Moderately effective (2)
    - Limited effectiveness (3)
    - Not effective (4)

7. What are the top three factors that contributed to effective facilitation, training and support provided to HCH practices?

    1. Factor 1 (1) _____
    2. Factor 2 (2) _____
    3. Factor 3 (3) _____

8. What are the top three factors that have made it difficult to provide effective facilitation, training and support to HCH practices?

    1. Factor 1 (1) _____
    2. Factor 2 (2) _____
    3. Factor 3 (3) _____

Other PHN initiatives

The following relates to other initiatives the PHN has implemented that have been used in the HCH program implementation. Initiatives may be related (but not limited) to:

- improving linkages between primary and other health services
- linking HCH practices into care coordination services commissioned by the PHN
- chronic and complex disease management
- electronic platforms to share patient care plans with other service providers
- quality improvement
- benchmarking
- collaboratives.

9. Please describe other PHN initiatives – such as those listed above - that have been used in the HCH program implementation since mid-2018 Please describe how these have contributed to the HCH implementation.

PHN staffing and resources

10. Please list the positions specifically assigned to support the implementation of the HCH program and the associated full-time-equivalent (FTE) employed against these positions for the 6-month periods indicated. The details you provided in the last PHN survey have been shown here. Please review and update if necessary. Please estimate staffing allocated in the January-June 2020 period.

#	Position name	2017-18		2018-19		2019-20		2020-21	
		Jul-Dec 2017 FTE	Jan-Jun 2018 FTE	Jul-Dec 2018 FTE	Jan-Jun 2019 FTE	Jul-Dec 2019 FTE	Jan-Jun 2020 FTE	Jul-Dec 2020 FTE	Jan-Jun 2021 FTE
1									
2									
3									
…									

11. Please estimated the contribution of staff who are indirectly involved in supporting the implementation of HCH (i.e. do not include the staff directly involved in supporting practices listed in the response to the previous question). Express your estimate as full-time equivalent (FTE) staff overall for the PHN. Please estimate the January-June 2020 period.

#	Position name	2017-18		2018-19		2019-20		2020-21	
		Jul-Dec 2017 FTE	Jan-Jun 2018 FTE	Jul-Dec 2018 FTE	Jan-Jun 2019 FTE	Jul-Dec 2019 FTE	Jan-Jun 2020 FTE	Jul-Dec 2020 FTE	Jan-Jun 2021 FTE
1									
2									
3									
…									

12. What else should we know about the size and nature of the PHN effort to support the implementation of the HCH program?

PHN views on other aspects of HCH program

13. Reflecting on the HCH program, how could governance of the HCH program within the PHN have been improved?

---

14. Reflecting on the HCH program, how could governance of the HCH program at the national level have been improved?

---

15. Please outline any further reflections you have had on the HCH program design and its implementation since the previous PHN surveys.

---

16. What have been the top three lesson your PHN has gained from participating in the HCH program.

    1. Factor 1 (1) _____
    2. Factor 2 (2) _____
    3. Factor 3 (3) _____

Benchmarking reports

17. How useful were the reports that you received from Health Policy Analysis/ the Centre for Big Data in Health Research (UNSW) benchmarking practices within your PHN?

    - ☐ 1 Very useful
    - ☐ 2 Moderately useful
    - ☐ 3 Limited
    - ☐ 4 Not useful
    - ☐ 5 Can't say/don't know

18. Do you have any suggestions for how to make the reports more useful for your PHN and/ or for practices (e.g. frequency, content, comparisons)?

PHN Survey - Round 5 Part B – HCH-A tool assessment

The following requests an assessment, by practice facilitators or other PHN staff, of each HCH practice against the questions within the HCH-A tool. The reported scores should reflect the practice facilitator's assessment of the practice at the commencement of the HCH program and at around November 2020. We have also asked you to provide an indication of the level of progress practices have made against these dimensions.

Practice name				
Practice facilitator assessment of practice on high level dimensions of HCH-A: Enter value between 1 and 12				
HCH-A question	Estimated score			How much progress has the practice made on this aspect of HCH/patient centred medical home feature, since the commencement of HCH implementation
	HCH commence-ment	Nov 2019	Nov 2020	
Q01				□ Significant progress □ Some progress □ No progress □ Worse
Q02				□ Significant progress □ Some progress □ No progress □ Worse
Q03				□ Significant progress □ Some progress □ No progress □ Worse
Q04				□ Significant progress □ Some progress □ No progress □ Worse
Q05				□ Significant progress □ Some progress □ No progress □ Worse
Q06				□ Significant progress □ Some progress □ No progress □ Worse
Q07				□ Significant progress □ Some progress □ No progress □ Worse
Q08				□ Significant progress □ Some progress □ No progress □ Worse
Q09				□ Significant progress □ Some progress □ No progress □ Worse
Q10				□ Significant progress □ Some progress □ No progress □ Worse
Q11				□ Significant progress □ Some progress □ No progress □ Worse
Q12				□ Significant progress □ Some progress □ No progress □ Worse
Q13				□ Significant progress □ Some progress □ No progress □ Worse
Q14				□ Significant progress □ Some progress □ No progress □ Worse
Q15				□ Significant progress □ Some progress □ No progress □ Worse
Q16				□ Significant progress □ Some progress □ No progress □ Worse
Q17				□ Significant progress □ Some progress □ No progress □ Worse
Q18				□ Significant progress □ Some progress □ No progress □ Worse
Q19				□ Significant progress □ Some progress □ No progress □ Worse
Q20				□ Significant progress □ Some progress □ No progress □ Worse
Q21				□ Significant progress □ Some progress □ No progress □ Worse
Q22				□ Significant progress □ Some progress □ No progress □ Worse
Q23				□ Significant progress □ Some progress □ No progress □ Worse
Q24				□ Significant progress □ Some progress □ No progress □ Worse
Q25				□ Significant progress □ Some progress □ No progress □ Worse
Q26				□ Significant progress □ Some progress □ No progress □ Worse
Q27				□ Significant progress □ Some progress □ No progress □ Worse
Q28				□ Significant progress □ Some progress □ No progress □ Worse
Q29				□ Significant progress □ Some progress □ No progress □ Worse
Q30				□ Significant progress □ Some progress □ No progress □ Worse
Q31				□ Significant progress □ Some progress □ No progress □ Worse
Q32				□ Significant progress □ Some progress □ No progress □ Worse
Q33				□ Significant progress □ Some progress □ No progress □ Worse
Q34				□ Significant progress □ Some progress □ No progress □ Worse
Q35				□ Significant progress □ Some progress □ No progress □ Worse
Q36				□ Significant progress □ Some progress □ No progress □ Worse
Other information that may be important in assessing the implementation of the HCH program				

Appendix F – Patient survey

Health Care Homes program patient survey

Introductory letter

Dear «Name»,

Recently, following discussions with your general practitioner (GP), you enrolled in the Health Care Homes program. Your enrolment included consent to providing information for evaluation of the program.

The Australian Government Department of Health has engaged my organisation, Health Policy Analysis, to evaluate the impact of the program. This information will help improve the program and the services provided by GPs to people in circumstances like yours.

We would like to invite you to participate in a 15-minute telephone survey to help us understand your experience. Someone from the Social Research Centre at the Australian National University will call you in the next few days to ask for your help. The survey includes questions about your health condition(s), how these have impacted your life, and the services you have received from your GP practice.

Any information you provide is confidential and will be stored separately to any identifying information about you so that the researchers analysing the information will not have access to your personal details. The information you provide may also be used for other research and if this occurs, the research project will be subject to a separate ethics approval.

You don't have to answer any question you don't want to, and you can end the interview at any time.

To book a time for an interview, or to opt out, please call the Social Research Centre on 1800 023 040. If you would like any further information about the research, please contact Health Policy Analysis on (02) 8065 6491 or me at jpearse@healthpolicy.com.au.

The evaluation of HCH was approved by the Department of Health Human Research Ethics Committee [Project 04-2017] in September 2017. This committee subsequently disbanded, and in September 2018, ethical oversight for the evaluation was transferred to the ACT Health Human Research Ethics Committee. If you have any concerns or complaints on the ethical conduct of this research, please contact the Committee Secretariat by email at ethics@act.gov.au. Information about the Health Care Homes program itself is available in the patient handbook, which your GP gave you when you enrolled or from the Department of Health's website at: www.health.gov.au/internet/main/publishing.nsf/content/health-care-homes.

As a token of our appreciation, and to say thank you for your time, we have included a $10 Coles Myer gift card. The gift card is yours to keep and use, regardless of whether you choose to participate in the survey.

Many thanks.

Jim Pearse

Director Health Policy Analysis Pty Ltd
Suite 101, 30 Atchison Street
St Leonards, NSW 2065

The questions below apply to all interview rounds (1, 2, 3) unless stated otherwise.

Computer assisted telephone interview operator introduction

Good <morning/afternoon> My name is <Interviewer name> from the Social Research Centre, calling on behalf of the Australian Government Department of Health and Health Policy Analysis.

Can I confirm I am speaking with <Patient name>?

You may recall we recently sent you <email/letter> about the Health Care Homes survey.

The survey will take 15-20 minutes and will help us understand the experiences of people like yourself with long-term health conditions to improve the care and service you receive.

All responses are completely confidential and your information is protected by Australian Privacy Laws.

Survey – Introduction

Would you be willing to help us out by completing the survey today?

1. Continue to survey
2. Household refusal
3. Respondent refusal
4. Language difficulty
   a. What language do you speak?
      i. Arabic
      ii. Italian
      iii. Greek
      iv. Mandarin
      v. Tamil
      vi. Some other language <please specify>
      Can you do the survey in English or do you need to speak <language specified at vi>
5. Queried about how telephone number was obtained
   a. We were given your details from your GP practice purely for the purpose of conducting this survey for the evaluation of the program.
6. Wants more information about the survey
   a. The survey asks questions about the care being provided to you by your GP and a few questions about you to help us interpret your responses. You are under no obligation to complete it. If you do complete it, your answers will be used to help us learn more about people's experiences with Health Care Homes and will be kept entirely confidential.

May I just check whether it is safe for you to take this call at the moment? If not, we'd be happy to call back when it is more convenient for you.

1. Safe to take call
2. Not safe to take call
3. (MAKE AN APPOINTMENT)
4. (Respondent refusal) (GO TO RR1)

Questionnaire body

Interview 1

Q1 Our records show that you recently saw a general practitioner, or GP, at <practice>, is that right?

1. Yes
2. No (SPECIFY PRACTICE NAME)
99. (Refused)

Q2 Is <practice> the GP practice you usually go to if you need a check-up, want advice about a health problem, or get sick or hurt?

1. Yes
2. No
99. (Refused)

Q3 How long have you been going to <practice>?

1. Months: _____ (WHOLE NUMBERS ONLY, RANGE 0-24)
2. Years: _____ (WHOLE NUMBERS ONLY, RANGE 0-80)
98. (Don't know)- Q3a
99. (Refused) - Q3a

If participant unsure go to Q3a

Q3a That's okay, do you know roughly how long you've been going to <practice>, would it be…?

1. Less than 6 months
2. At least 6 months but less than 1 year
3. At least 1 year but less than 3 years
4. At least 3 years but less than 5 years
5. 5 years or more
98. (Don't know)
99. (Refused)

Interviews 2 and 3

Q1A We interviewed you around 12 months ago, soon after you joined the HCH program. I understand that you usually see GP, at <practice>, is that right?

1. Yes
2. No (SPECIFY PRACTICE NAME)
99. (Refused)

Q2A Is <practice> the GP practice you usually go to if you need a check-up, want advice about a health problem, or get sick or hurt?

1. Yes
2. No
99. (Refused)

Q4 In the last 6 months, how many times did you visit <practice>?

1. Visits: _____ (WHOLE NUMBERS ONLY, RANGE 0-100)
98. (Don't know) – Q4a
99. (Refused) – Q4a

*if participant unsure go to Q4a

Q4a That's okay, do you know roughly how many times you've visited in the last 6 months, would it be…?

1. Once
2. Twice
3. 3 times
4. 4 times
5. 5-9 times
6. 10 or more times
7. Never
98. (Don't know)
99. (Refused)

Q5 In the past 6 months, apart from scheduling appointments, how many times did you contact your GP or other professional in <practice> about your health — for example, by email or phone call?

1. Contacts: _____ (WHOLE NUMBERS ONLY, RANGE 0-50)
98. (Don't know) – Q5a
99. (Refused) – Q5a

*if participant unsure go to Q5a

Q5a That's okay, do you know roughly how many times you contacted them in the last 6 months, would it be…?

1. Once
2. Twice
3. 3 times
4. 4 times
5. 5-9 times
6. 10 or more times
7. Never
98. (Don't know)
99. (Refused)

Q6 Have you registered for My Health Record?

If participant unsure please read: My Health Record is a secure online summary of your health information run by the Australian government. You can control what goes into it, and who is allowed to access it. You can choose to share your health information with your doctors, hospitals, and other healthcare providers.)

1. Yes
2. No
98. (Don't know – USE ONLY AFTER READING DETAILS)
99. (Refused)

MODULE B – Health Care Homes questions

Introductory statement

The following questions are about your experiences with your GP, or staff at <practice>, <<**Interview 1 only:** prior to enrolling in the Health Care Homes program>> << Interviews 2 and 3: over the last 6 months>>.

Interview 1

Q7 Before enrolling in the Health Care Homes program, did you have a treatment plan or shared care plan which your GP or staff at <practice> had developed with you?

If participant unsure please read: A treatment plan or shared care plan is a document that brings together all the relevant health and medical information related to your long-term health condition(s) and ongoing treatment. You can take it to all your appointments so that all medical staff have access to the same information and you can track your progress against the plan.

1. Yes
2. No
98. (Don't know – USE ONLY AFTER READING DETAILS)
99. (Refused)

Interviews 2 and 3

Q7A Do you have a treatment plan or shared care plan which your GP or staff at <practice> had developed with you?

If participant unsure please read: A treatment plan or shared care plan is a document that brings together all the relevant health and medical information related to your long-term health condition(s) and ongoing treatment. You can take it to all your appointments so that all medical staff have access to the same information and you can track your progress against the plan.

1. Yes
2. No
98. (Don't know – USE ONLY AFTER READING DETAILS)
99. (Refused)

Go to Q8 if participant answered yes to Q7, if no go to Q11.

Q8 Over the last six months <<**Interview 1 only:** prior to enrolling in the Health Care Homes program>> how often did you discuss your treatment plan or shared care plan with your GP or staff at <practice>?

1. At most or all consultations
2. It was sometimes discussed
3. It was never discussed
98. (Don't know)
99. (Refused)

*Q9 if participant answered yes to Q7 if no go to Q11

Q9 Were you given a copy of your treatment plan or shared care plan in the last 6 months?

1. Yes
2. No
98. (Don't know)
99. (Refused)

*(Q10 if participant answered yes to Q7 (has care plan) and yes to Q6(has MY Health Record) If no to either go to Q11.

Q10 Was a copy of this treatment or shared care plan included in My Health Record?

1. Yes
2. No
98. (Don't know)
99. (Refused)

Q11 Over the past 6 months <<**Interview 1 only:** prior to enrolling in the Health Care Homes program>> when you discussed your health and treatment options with your GP and other staff in <practice>, how often did the following occur:

a. I was asked for my ideas when we made the treatment or shared care plan, or discussed this plan. OR I was asked for my ideas when we made decisions about my treatment.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

b. I was given choices about treatment to think about.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

c. I was sure that my doctor or nurse thought about my values, beliefs, and traditions when they recommended treatments to me.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

d. I was shown how what I did to care for myself influenced my condition.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

e. I was asked to talk about my goals in caring for my condition.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always

98. (Don't know)
99. (Refused)

f. I was helped to set specific goals to improve my eating or exercise.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

Q12 Over the past 6 months<<**Interview 1 only:** prior to enrolling in the Health Care Homes program>>, when you attended <practice>, how often did the following occur:

a. I was given a written list of things I should do to improve my health.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

b. I was asked questions, either directly or on a survey, about my health habits.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

c. I was satisfied that my care was well organised.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

d. I was contacted after a visit to see how things were going.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

e. I was encouraged to attend programs in the community that could help me.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

f. I was asked how my visits with other doctors were going.

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

Q13 Over the last 6 months, how often did you and your GP, or someone from <practice>, talk about all the prescription medicines you were taking?

1. Never
2. Some of the times I attended the practice
3. Most of the times I attended the practice
97. (Not applicable – respondent not taking prescription medication)
98. (Don't know)
99. (Refused)

Interviews 2 and 3

Q13A In the last 12 months have you had a consultation with a pharmacist who reviewed all the medicines you are taking and spent time with you to explain each of your medications?

1. No
2. Yes
98. (Don't know)
99. (Refused)

If 1 No Display questions 13B
If 2 Yes skip to question 13C

Q13B Would it be helpful if you could have a consultation with a pharmacist to review all the medicines you are taking and be able to ask questions about them?

1. Yes
2. No
98. (Don't know)
99. (Refused)

Skip to question 14

Q13C Where did you see your pharmacist when you had this consultation?

1. In your GP's practice
2. At a community pharmacy
3. At home
4. Somewhere else
98. (Don't know)
99. (Refused)

Q13D When you had this consultation, did your pharmacist give you a list of all the medicines you are taking?

1. No
2. Yes
98. (Don't know)
99. (Refused)

Q14 Over the last 6 months, did you contact <practice> to get an appointment for an illness, injury, or condition that needed care right away?

1. Yes
2. No
98. (Don't know)
99. (Refused)

IF yes to Q14 go to Q15, else go to Q16.

Q15 When you contacted <practice> to get an appointment for care you needed right away, how often did you get an appointment as soon as you needed?

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

Q16 Over the last 6 months, did you make any appointments for a check-up or routine care with your GP's practice?

1. Yes
2. No
98. (Don't know)
99. (Refused)

If yes to Q16 go to Q17, else go to Q18.

Q17 When you made an appointment for a check-up or routine care with <practice>, how often did you get an appointment as soon as you needed?

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

Q18 When you made an appointment or attended <practice> for any reason, how often did you get an appointment with your own personal GP?

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. Always
98. (Don't know)
99. (Refused)

Q19 Using any number from 0 to 10, where 0 is the worst GP practice possible and 10 is the best GP practice possible, what number would you use to rate <practice> overall?

0. Worst GP practice possible
1.
2.
3.
4.
5.
6.
7.
8.
9.
10. Best GP practice possible
98. (Don't know)
99. (Refused)

MODULE C – Health statements

Q20 I'd now like to read you some statements people sometimes make when they talk about their health. Can you tell me how much you personally agree or disagree with each statement?

a. When all is said and done, I am the person who is responsible for managing my health condition(s).

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

b. Taking an active role in my own health care is the most important factor in determining my health and ability to function.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

c. I know what each of my prescribed medications do.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

d. I understand the nature and causes of my health condition(s).

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

e. I know the different medical treatment options available for my health condition(s).

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

f. I have been able to maintain the lifestyle changes for my health that I have made.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

g. I know how to prevent further problems with my health condition.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

Q21 I'll now read some statements people sometimes make when they talk about how confident they are in managing their health. Can you tell me how much you personally agree or disagree with each statement?

a. I am confident that I can take actions that will help prevent or minimise some symptoms or problems associated with my health condition.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

b. I am confident that I can tell when I need to go get medical care and when I can handle a health problem myself.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

c. I am confident I can tell my health care provider concerns I have even when he or she does not ask.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

d. I am confident that I can follow through on medical treatments I need to do at home.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

e. I am confident I can figure out solutions when new situations or problems arise with my health condition.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

f. I am confident that I can maintain lifestyle changes like diet and exercise even during times of stress.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree
98. (Don't know)
99. (Refused)

MODULE D – Overall health today

Q22 Can you please tell me whether you have ever been told by a doctor that you…?

a. Have heart disease (includes coronary heart disease, angina, cardiomyopathy, ischaemic heart disease, heart failure, hypertensive heart disease, inflammatory heart disease, disease affecting one or more valves of the heart, heart murmur, having a pacemaker)

1. Yes
2. No
98. (Don't know)
99. (Refused)

b. Have had a stroke (this includes mini strokes, aneurisms, trans-ischemic attacks)

1. Yes
2. No
98. (Don't know)
99. (Refused)

c. Have cancer (includes skin cancer)

1. Yes
2. No
98. (Don't know)
99. (Refused)

d. Have osteoporosis (not osteoarthritis)

1. Yes
2. No
98. (Don't know)
99. (Refused)

e. Have depression or anxiety

1. Yes
2. No
98. (Don't know)
99. (Refused)

f. Have arthritis

1. Yes
2. No
98. (Don't know)
99. (Refused)

g. Have diabetes

1. Yes
2. No
98. (Don't know)
99. (Refused)

h. Have high blood pressure

1. Yes
2. No
98. (Don't know)
99. (Refused)

i. Have asthma

1. Yes
2. No
98. (Don't know)
99. (Refused)

j. Have another chronic health condition

1. Yes
2. No
98. (Don't know)
99. (Refused)

Q23 In the last 12 months, have you attended a hospital emergency department (or casualty) for your own medical care?

1. Yes
2. No
99. (Refused)

Q24 In the last 12 months, have you stayed one or more nights in hospital?

1. Yes
2. No
99. (Refused)

Q25 In general, how would you rate your overall health, is it…?

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor
98. (Don't know)
99. (Refused)

Q26 In general, how would you rate your overall mental or emotional health, is it…?

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor
98. (Don't know)
99. (Refused)

Q27 Which of the following best describes your mobility today, would you say…?

1. I have no problems in walking about
2. I have slight problems in walking about
3. I have moderate problems in walking about
4. I have severe problems in walking about
5. I am unable to walk about
98. (Don't know)
99. (Refused)

Q28 Which of the following best describes your self-care today, would you say …?

1. I have no problems washing or dressing myself
2. I have slight problems washing or dressing myself
3. I have moderate problems washing or dressing myself
4. I have severe problems washing or dressing myself
5. I am unable to wash or dress myself
98. (Don't know)
99. (Refused)

Q29 Which of the following best describes your usual activities today (e.g. Work, study, housework, family, or leisure activities), would you say …?

1. I have no problems doing my usual activities
2. I have slight problems doing my usual activities
3. I have moderate problems doing my usual activities
4. I have severe problems doing my usual activities
5. I am unable to do my usual activities
98. (Don't know)
99. (Refused)

Q30 Which of the following best describes your pain or discomfort today, would you say?

1. I have no pain or discomfort
2. I have slight pain or discomfort
3. I have moderate pain or discomfort
4. I have severe pain or discomfort
5. I have extreme pain or discomfort
98. (Don't know)
99. (Refused)

Q31 Which of the following best describes your anxiety or depression today, would you say?

1. I am not anxious or depressed
2. I am slightly anxious or depressed
3. I am moderately anxious or depressed
4. I am severely anxious or depressed
5. I am extremely anxious or depressed
98. (Don't know)
99. (Refused)

Q32 We would like to know how good or bad your health is today. On a scale of 0 to 100 where 100 means the best health you can imagine and 0 means the worst health you can imagine, what number best describes your health today?

1. Rating: _____ (RANGE 0-100, WHOLE NUMBERS)
98. (Don't know)
99. (Refused)

MODULE E – Demographics

Q33 Finally, just a few questions to help us with our analysis.

Which of the following best describes your household, is it…?

1. Person living alone
2. Couple only
3. Couple with non-dependent child or children
4. Couple with dependent child or children
5. Couple with dependent and non-dependent child or children
6. Single parent with non-dependent child or children
7. Single parent with dependent child or children
8. Single parent with dependent and non-dependent child or children
9. Non-related adults sharing house/apartment/flat
10. Other household type
98. (Don't know)
99. (Refused)

Q34 Are you of Aboriginal or Torres Strait Islander origin?

1. Yes – Aboriginal
2. Yes – Torres Strait Islander
3. Yes – both
4. No
98. (Don't know)
99. (Refused)

Interview 1 only

Q35 In which country were you born?

1. Australia
2. England (including England, Scotland, Northern Ireland, Wales)
3. India
4. New Zealand
5. Italy
6. Greece
7. Vietnam
8. Ireland
9. China
10. Other (please specify)
99. (Refused)

Q36 What is the highest level of education you have completed?

1. No formal schooling
2. Primary school
3. Year 9 or below
4. Year 10 or equivalent
5. Year 11 or equivalent
6. Year 12 or equivalent
7. Certificate I to IV (including trade certificate)
8. Advanced diploma/Diploma
9. Bachelor Degree
10. Post-Graduate Degree
11. Other
99. (Refused)

Computer assisted telephone interview operator closing questions and script

Close Q1

Health Policy Analysis may like to invite you to participate in a follow up Face-to-face interview to help them understand your experience. The interview will take about 30 minutes. If this goes ahead, would you be happy for us to re-contact you?

1. Yes
2. No

If yes to close Q1, else closing script.

Close Q2. Great. Just to confirm, what's your preferred contact number?

Main: [DISPLAY PHONENUMBER]

Secondary: [DISPLAY ALTNUM1]

Closing script

That is the end of the survey, thank very much for your time. Just in case you missed it, my name is [INT] from the Social Research Centre and this survey was conducted on behalf of Health Policy Analysis and the Australian Government's Department of Health.

If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis. Would you like a contact number or email address to contact them on? (READ OUT AS REQUIRED: Jim Pearse, (02) 8065 6491, jpearse@healthpolicy.com.au)

If you have any questions regarding the Health Care Homes program, I can give you an email address? (READ OUT IF REQUIRED: healthcarehomes@health.gov.au)

This research study has been carried out in compliance with the Privacy Act and the Australian Privacy Principles, and the information you have provided will only be used for research purposes. You will not be identified in any of the documents reporting the results of this survey.

[INTERVIEWER NOTES]

The evaluation is being conducted by Health Policy Analysis on behalf of the Commonwealth Department of Health. If you have any questions regarding the Health Care Homes program, please contact healthcarehomes@health.gov.au.

If you would like any further information about this survey or the evaluation, please contact Health Policy Analysis on (02) 8065 6491 or info@healthpolicy.com.au.

This study has been approved by the Department of Health Human Research Ethics Committee <reference number>. If you have any concerns or complaints on the ethical conduct of this research, please contact the Committee Secretariat, Department of Health Human Research Ethics Committee, Department of Health, by email at ethics@health.gov.au. The issue will then be referred to the Chair of the Committee.

Interviewer close Q1. **Not to be asked of the participant**

Did someone help the QR answer this survey in any way?

1. Yes – answered for them (proxy)
2. Yes – helped them answer some questions
3. No – did not need any help

Appendix G – Interview and focus group questions

*Note: Interviews with all groups will be conducted in Round 2 (**R2**), Round 4 (**R4**) and Round 5 (**R5**) of the evaluation. Some questions pertain to one round only, and are marked as such. Where questions are not marked, they pertain to all rounds.*

Topic guide – Patient* interviews

Topic	Question
Introduction	• Introduction of researcher and describe the project and its purpose. • Provide written plain language statement and consent form. • From plain language statement and consent form: • Remind the participant that participation is voluntary; that they do not have to take part, and that there will be no repercussions if they choose not to do so. • Describe what participation in the interview involves. • Remind the participant that they can withdraw from the interview at any time, and that they do not have to answer any further questions. • Outline confidentiality/anonymity provisions, that is, that the participant will not be named in any reporting of results to any parties, that any personal information gathered will not be disclosed to any other party, and that the information provided will not be shared with the GP, other staff in the practice, or any other healthcare provider. • Outline how the participant will be informed of the results of the research when it is finished. • Point out section in the statement on who to contact in case of any or concerns or questions that may arise after the interview. • Seek permission to audio record interview. • Check whether the participant has any questions. • Obtain signature on consent form.
Conditions being managed by GP	• (**R2**) Could you tell me about the health conditions you are seeing your GP for at the moment? • (**R4/R5**) Could you tell me about the health conditions you are seeing your GP for at the moment? Has this changed from when you were last interviewed?
Decision to enroll in HCH	• (**R2**) What led you decide to enroll in HCH?
Care process	• How is your GP or others at your GP's practice (such as a nurse) helping you to manage your health condition(s)? Prompts – assistance with/ how assistance is being provided:

Topic	Question
	• Understanding nature and cause of health conditions(s)? • Understanding the role of medications and other treatments? • Skills for day-to-day management? • Identifying and preventing further problems? • Role of lifestyle factors and skills to make changes? • Emotional support? • Referrals to other services (e.g. specialists, allied health, lifestyle programs)? • Access to aides/ devices? • How has this help impacted on how confident you feel about what you need to do to look after yourself?
Shared care plan	• (**R2**) Do you have a written plan or a plan you access online that shows what treatments you and your GP have agreed on and what other appointments you might need? If yes: • What was your involvement in developing this plan? • How often do you discuss the plan with your GP? • Do you discuss it with other healthcare providers (e.g. specialists, allied health)? • In what ways have you and your GP been able to use the plan to manage your health condition(s)? • Has your plan been uploaded in *My Health Record*? If so, has this been useful? If not uploaded, why not? • (**R4/R5**) In what ways has the plan that you have with your GP about the care that you are getting from the GP and other healthcare providers been useful? Prompts: • Has the plan been reviewed since it was initially developed? • What involvement have you had in reviewing the plan? • How often do you discuss the plan with your GP? • Do you discuss it with other healthcare providers? • In what ways have you and your GP been able to use the plan to manage your health condition(s)? • Has your plan been uploaded in My Health Record? If so, has this been useful? If not uploaded, why not?
Expectations	• (**R2**) How does the care that you get now align what you expected when you enrolled in HCH? Prompts: • What were your expectations? • Is what you are getting now better/ the same/ worse than what you expected? How is it better/ the same/ worse? • (**R4/R5**) How does the care that you get now changed in the last 12 months? How has it changes since you enrolled in HCH? Prompts:

Topic	Question
	• Is what you are getting now better/ the same/ worse than before? How is it better/ the same/ worse?
What works?	• What has been the most helpful for you in the care that you have been getting through HCH to manage your conditions? How is this helpful? • What else has been helpful? How? • What hasn't been helpful? How is this not helpful to you?
Medications	• Has a GP or pharmacist recently reviewed all the medicines you are taking? If so: • Can you tell me about how this happened? • Was it helpful? • How well do you think your GP and pharmacist work together?
For patients referred to a community pharmacist	• **(R4/R5)** How many consultations did you have with your pharmacist over the last 12 months? • How adequate was the number of sessions that you had with your pharmacist for your needs? • How is your pharmacist helping you to manage your medication? Prompts – assistance with/ how assistance is being provided: • Understand the role of medications for the treatment of your medical conditions? • Safety in taking medication? • Best ways to take medications (e.g. time, does, storage)? • Collaborating with your GP? • Improved confidence in taking your medications? • Reminds me when to take my medications? • Helps me to organize my medications? • Shows me how to use my medical device (i.e. asthma puffer)? • **(R4/R5)** How is your pharmacist helping you achieve your medication management goals? Prompts – assistance with/ how assistance is being provided: • Blood pressure monitoring? • Blood glucose monitoring? • Asthma management plan? • Dose Administration aids?
Message for practice	• What advice would you give your GP and/ or other providers within the practice about how to be most helpful to you to manage or improve your health?
Message for other patients	• **(R4/R5)** Would you recommend enrolling in HCH to other patients with conditions similar to yours? If yes, on what basis? If not, why not?
Anything else?	• Is there anything else that you would like to mention?

** 'Patient' includes carers and/ or family members of enrolled patients that may be involved in interviews as a proxy for the patient, or to voice their own views.*

Topic guide – Patient* focus groups

Topic	Question
Introduction	• Introduction of researcher and describe the project and its purpose. • Provide written plain language statement and consent form. • From plain language statement and consent form:

Topic	Question
	• Remind participants that participation is voluntary; that they do not have to take part, and that there will be no repercussions if they choose not to do so. • Describe what participation in the focus group involves, including 'ground rules', particularly keeping confidential information that is disclosed by other participants. • Remind the participants that they can withdraw from the focus group at any time, and that they do not have to answer any further questions. • Outline confidentiality/anonymity provisions, that is, that the participant will not be named in any reporting of results to any parties, that any personal information gathered will not be disclosed to any other party, and that the information provided will not be shared with the GP, other staff in the practice, or any other healthcare provider. • Outline how the participants will be informed of the results of the research when it is finished. • Point out section in the statement on who to contact in case of any or concerns or questions that may arise after the focus group. • Seek permission to audio record the focus group. • Check whether participants have any questions. • Obtain signatures on consent form.
Decision to enroll in HCH	• **(R2)** What led you decide to enroll in HCH?
Care process/ impact of HCH	• In what ways, if any, has the care that you have been receiving from your GP and other care providers at the practice changed since you enrolled in HCH (**R2/R4/R5**)/ in the last 12 months (**R4/R5**)? Prompts – any improvements in: ◦ Understanding nature and cause of health conditions(s)? ◦ Understanding the role of medications and other treatments? ◦ Skills for day-to-day management? ◦ Identifying and preventing further problems? ◦ Role of lifestyle factors and skills to make changes? ◦ Emotional support? ◦ Referrals to other services (e.g. specialists, allied health, lifestyle programs)? ◦ Access to aides/ devices? • Is what you are getting now better/ the same/ worse than before? How is it better/ the same/ worse?
Expectations	• How does the care that you get now align what you expected when you enrolled in HCH? Prompts: ◦ What were your expectations? ◦ Is what you are getting now better/ the same/ worse than what you expected? How is it better/ the same/ worse?
Shared care plan	• (**R2**) What experiences have you had with developing a plan with your GP for the care that you are getting from the GP and from other healthcare providers?

Topic	Question
	• (**R4/R5**) In what ways has the plan that you have with your GP about the care that you are getting from the GP and from other healthcare providers been useful? • Has your plan been uploaded in *My Health Record*? If so, has this been useful? If not uploaded, why not?
What works?	• What has been the most helpful for you in the care that you have been getting through HCH to manage your conditions? How is this helpful? • What else has been helpful? How? • What hasn't been helpful? How is this not helpful to you?

Medications	• Has a GP or pharmacist recently reviewed all the medicines you are taking? If so:
	  • Can you tell me about how this happened?
	  • Was it helpful?
	• How well do you think your GP and pharmacist work together?

For patients referred to a community pharmacist	• **(R4)** How is your pharmacist helping you to manage your medication?
	
	Prompts – assistance with/ how assistance is being provided:
	  • Understand the role of medications for the treatment of your medical conditions?
	  • Safety in taking medication?
	  • Best ways to take medications (e.g. time, does, storage)?
	  • Collaborating with your GP?
	  • Improved confidence in taking your medications?
	  • Reminds me when to take my medications?
	  • Helps me to organize my medications?
	  • Shows me how to use my medical device (i.e. asthma puffer)?
	
	• **(R5)** How is your pharmacist helping you achieve your medication management goals?
	
	Prompts – assistance with/ how assistance is being provided:
	  • Blood pressure monitoring?
	  • Blood glucose monitoring?
	  • Asthma management plan?
	  • Dose Administration aids?

Message for practice	• What advice would you give your GP and/ or other providers within the practice about how to be most helpful to you and other patients like you to manage or improve your health?
Message for other patients	• (**R4/R5**) Would you recommend enrolling in HCH to other patients with conditions similar to yours? If yes, on what basis? If not, why not?
Anything else?	• Is there anything else that we haven't discussed that you would like to mention?

** 'Patient' includes carers and/ or family members of enrolled patients that may be involved in focus groups as a proxy for the patient, or to voice their own views.*

Topic guide – Practice* interviews

Topic	Question
Introduction	• Introduction of researcher and describe the project and its purpose. • Outline: • Remind the participant(s) that participation is voluntary; that they do not have to take part, and that there will be no repercussions if they choose not to do so. • Describe what participation in the interview involves. • Remind the participant that they can withdraw from the interview at any time, and that they do not have to answer any further questions. • Outline confidentiality/anonymity provisions, that is, that the practice and individuals responding on behalf of the practice will not be named in any reporting of results to any parties. • Outline how the practice will be informed of the results of the research when it is finished. • Provide details on who to contact in case of any or concerns or questions that may arise after the interview. • Seek permission to audio record the interview. • Check whether the participant(s) has(ve) any questions. • Seek verbal consent for participation.
Initiatives under HCH	• (**R2**) When you agreed to participate in HCH, what changes did you anticipate making within the practice? • What were the aims of these? (E.g. care planning, improve access/ flexibility of access, patient engagement, patient self-management, improved chronic disease management). • Which of the changes that you mentioned have you been able to make? • How did you make these changes? • **(R4/R5)** What changes have occurred in the practice in last 12 months? • How much of the change that you expected to make have you made to date?
Shared care plans/ planning process	• What changes, if any, have there been to the care plan/ care planning process for enrolled patients? Prompts: • Changes in patient involvement in development/ review of the plan? • Contents of the care plan? • The way in which the plan is communicated to the patient? • Regularity of discussion of the plan with the patient? • Regularity of discussion of the plan with the patient's other healthcare providers? • Frequency of reviews? • Has *My Health Record* been used for sharing care plans with patients and/ or their carer/ family and/ or other clinical staff outside the practice involved with the clinical care of the patient? If so, has this been useful? If *My Health Record* has not been used, what are the main reasons for this?
Contextual information/ factors	• What changes/ initiatives, if any, are occurring/ have occurred within your practice not related to HCH that have impacted on the changes that you set out to make in implementing HCH?

Topic	Question
	• What changes/ initiatives, if any, are occurring/ have occurred outside of your practice not related to HCH that have impacted on the changes that you set out to make in implementing HCH?
HCH enrollees	• Did you select the right patients to enroll in HCH? If so, how do you know? If not, what type of patients are better suited to HCH and why?
Movement towards intended outcomes	• Is what you have done so far working? How do you know?
Impact on practice staff	• What have been the impacts of the changes that you've made on practice staff? Prompts: • Employed new staff (if so, in what roles)? • Staff changed the scope/ breadth/ ability to delegate parts of their job? • Changes to staff experience/ satisfaction.
Unintended impacts/ outcomes	• What have been unintended impacts/ outcomes of the initiatives that you implemented, if any (on enrolled patients, other patients of the practice and/ or staff)?
Enablers and barriers	• What factors contributed to being able to make the changes you did make and/ or achieving the results that you have from these changes? • What factors have prevented you doing what you set out to do and/ or from making the gains you expected to make so far? Prompts: • Internal (within the practice). For example, physical space/ layout to facilitate team care or other activities, working together across professional boundaries or within teams to implement the intervention. • External (e.g. PHN, LHN, state/ territory, national).
Benchmark reports	• Do you recall receiving a report from Health Policy Analysis that compares the patient enrolled in HCH at your practice with patients from other practices? How did you use that report? • Was it useful? Why or why not? • Do you have any suggestions for how to make the reports more useful for your practice (e.g. frequency, content, comparisons)?
Messages for other practices	• (**R2**) Given what you've learned so far, what messages would you give other practices embarking on implementing HCH about how to go about it? • (**R4/R5**) Given what you've learned since implementing HCH, what messages would you give other practices embarking on the same journey about how to go about it? • (**R4/R5**) Would you recommend to other practices to implement HCH?
Anything else?	• Is there anything else that we haven't discussed that you would like to mention?

** 'Practice' is used as a general term to encompass all primary care entities participating in HCH. Alternative terms include 'service', 'organisation', and 'clinic'.*

Topic guide – Practice* staff** interviews

Topic	Question
Introduction	• Introduction of researcher and describe the project and its purpose. • Outline: • Remind the participant that participation is voluntary; that they do not have to take part, and that there will be no repercussions if they choose not to do so. • Describe what participation in the interview involves. • Remind the participant that they can withdraw from the interview at any time, and that they do not have to answer any further questions. • Outline confidentiality/anonymity provisions, that is, that the practice and participant will not be named in any reporting of results to any parties, and that the participants responses will not be shared with / disclosed to any other person in the practice. • Outline how the practice will be informed of the results of the research when it is finished. • Provide details on who to contact in case of any or concerns or questions that may arise after the interview. • Seek permission to audio record the interview. • Check whether the participant has any questions. • Seek verbal consent for participation.
Role	• What is your role within the practice? • How long have you been working in the practice? (In the same role, or a different role?)
Initiatives under HCH	• What involvement did you have in establishing the changes/ initiatives in relation to HCH at your practice? • If no involvement, what changes were you told about or noticed occurring at the practice? • **(**How have the changes/ initiatives impacted on the way that care is delivered to HCH patients? • **R5** From your perspective what have been the most important changes that have occurred in this practice since it started with HCH? Prompts: • Changes to care plan/ planning process. • Changes to access/ flexibility of access to practice services by patients. • Patient engagement in their care/ care planning. • Assistance provided to patients to self-manage. • Approach to chronic disease management. • Changes to referrals / use of other services? • Changes to patients' access to aides/ devices?
Impact on patients	• How effective have the changes implemented been for patients? • If effective, in what way have they been effective? How do you know? • If not effective, what are your thoughts about why they haven't been effective?
Impact on staff member	• Have the changes/ initiatives impacted on how you interact with other staff at the practice? If so, what have been the impacts?

Topic	Question
	• What impacts, if any, have the changes had on your role? Prompts: • Depth (e.g. extending skills). • Breadth (e.g. wider range of tasks, and/or working with a broader range of organisations). • Ability to delegate to others. • Having more responsibility delegated. • What impact have the changes had on your satisfaction with your job?
Interaction with community pharmacy – GPs only	• **(R4)** How did you select the patients that you referred to the Trial Program? • What have the pharmacists done for your patients? • How do you work with the pharmacists? • Is there any overlap between what you do and what the pharmacist does? • What changes have you seen in your patients (if any) as a result of their participating in the Trial Program? • Is there anything else that you would like to add about working with the community pharmacists in helping your patients manage their medications?
Practice-based pharmacist	• **(R4)** Is there a pharmacist who works in your practice? (This may be a pharmacist employed by your practice or a visiting pharmacist.) If so, how does this pharmacist work with HCH patients and other staff?
Anything else?	• Is there anything else that we haven't discussed that you would like to mention?

** 'Practice' is used as a general term to encompass all primary care entities participating in HCH. Alternative terms include 'service', 'organisation', and 'clinic'; ** Includes all staff of a practice, clinical and non-clinical, involved in HCH.*

Topic guide – Community pharmacists (rounds 4 and 5 only)

Topic	Question
Introduction	• Introduction of researcher and describe the project and its purpose. • Remind the participant that participation is voluntary; that they do not have to take part, and that there will be no repercussions if they choose not to do so. • Remind the participant that they can withdraw from the interview at any time, and that they do not have to answer any further questions. • Outline confidentiality/anonymity provisions, that is, that they or anyone (or practice) will not be named in any reporting of results to any parties. • Outline how they will be informed of the results of the research when it is finished. • Provide details on who to contact in case of any or concerns or questions that may arise after the interview. • Seek permission to audio record the interview. • Check whether the participant has any questions. • Seek verbal consent for participation.
Background	• How many patients approximately have you had referred as part of the Trial Program? • How many different GPs/ practices are the patients referred from? • Did you provide Home Medicine Reviews for patients prior to the Trial Program? • Did you provide MedsCheck or Diabetes MedsCheck service to any of the clients of your pharmacy prior to the Trial Program?

Topic	Question
	• What training did you participate in for the Trial Program?
Collaboration with GP	• How are patients referred to you by the GP? • Are the practices referring the right sort of patients to you to receive these services? If yes, what does this mean? If not, what are the issues? • How do you work with the GPs? • How often would you be in contact typically with a patient's GP? • Is this more, less or about the same as contact that you would have had previously under different initiatives (e.g. Home Medicine Review, MedsCheck)? • Is there any overlap between what you do and what the GP does? • Are your recommendations for your patient taken up by their GP?
Impact on pharmacist	• What changes have you/your pharmacy made to the way that you do things as a result of the Trial Program?

Medication Management plan	• How do you approach developing MMPs?
	• Was the online process useful in populating the MMP?
	• Is this different to the way that you may have done these before? If so, how?
	Prompts
	  • Changes in patient involvement in development/ review of the plan?
	  • Regularity of discussion of the plan with the patient?
	  • Regularity of discussion of the plan with the patient's GP, care coordinator or Aboriginal Health Worker?
	• How have these changes come about?

Medication delivery aids	• What proportion of your Trial Program patients require a dose administration aid? • Were any of these patients using dose administration aids previously? • How do you determine whether a patient would be suitable for a dose administration aid?
Supporting services (i.e. blood glucose monitoring, blood pressure monitoring, asthma management plan etc.)	• What were the most common supporting services you delivered? • How did you assess what service was required for what type of patient, and who would benefit from the service? • In your opinion, would Tier 1 patients have benefitted from supporting services? If so, under what circumstances? Did you provide any supporting services to Tier 1 patients outside of the Trial Program (e.g. the patient paid for the service)?
Time estimates	• Thinking about a typical Tier 1 patient, can you break down the activities that you undertake in relation to that patient outside of the direct consultation with the patient (e.g. communicating with the patient's HCH and organising services)? How much time would you spend on each of those activities, and how many activities over a 12-month period? How much time would you typically spend in the initial consultation with the patient, and then how much time for each follow up consultation? • As above for a typical Tier 2 patient. • As above for a typical Tier 3 patient.

Impacts/ outcomes	• What changes have you seen in your patients (if any) as a result of their participating in the Trial Program?
	Prompts:
	  • Engagement in care planning/ medication management.
	  • Understanding nature and cause of health conditions(s).
	  • Understanding the role of medications and other treatments.
	  • Skills for day-to-day management.
	  • Understanding of role of lifestyle factors and skills to make changes.
	  • Identifying and preventing further problems.

Topic	Question
	• Access to aides/ devices and medication management support services.
Recommendation	• Should the Trial Program continue? • If not, why not? • If so, would you recommend any changes?
Anything else?	• Is there anything else that we haven't discussed that you would like to mention?

Topic guide – Related provider focus groups (except community pharmacists)

Topic	Question
Introduction	• Introduction of researcher and describe the project and its purpose. • Outline: • Remind the participant(s) that participation is voluntary; that they do not have to take part, and that there will be no repercussions if they choose not to do so. • Describe what participation in the focus group involves. • Remind the participant that they can withdraw from the focus group at any time, and that they do not have to answer any further questions. • Outline confidentiality/anonymity provisions, that is, that the practice and individuals responding on behalf of the practice will not be named in any reporting of results to any parties. • Outline how the practice will be informed of the results of the research when it is finished. • Provide details on who to contact in case of any or concerns or questions that may arise after the focus group. • Seek permission to audio record the focus group. • Check whether the participant(s) has(ve) any questions. • Seek verbal consent for participation.
Initiatives under HCH	• What changes, if any, have occurred at the HCH practices that you share patients with (**R2**) since the start of HCH/ (**R4/R5**) in the last 12 months)? • How did you become aware of these changes?
Impact on related provider	• What changes have you made, if any, to the way that you practice/ deliver care to patients within the HCH target group? • Have any of these been prompted by the implementation of HCH at the practices that you share patients with?
Shared care plan/ planning process	• What changes, if any, have there been to the care plan/ care planning process for the patients that you jointly manage with the HCH practice(s)? Prompts • Changes in patient involvement in development/ review of the plan? • Content of the care plan? • The way in which the plan is communicated to the patient? • Regularity of discussion of the plan with the patient? • Regularity of discussion of the plan with the patient's GP? • How have these changes come about?

Topic	Question
Impacts/ outcomes	• (**R2)** What impacts/ outcomes have you noticed in HCH enrollees since the implementation of HCH? • (**R4/R5)** What impacts/ outcomes have you noticed in HCH enrollees in the last 12 months? …since the implementation of HCH? Prompts: • Engagement in care planning. • Understanding nature and cause of health conditions(s). • Understanding the role of medications and other treatments. • Skills for day-to-day management. • Understanding of role of lifestyle factors and skills to make changes. • Identifying and preventing further problems. • Referrals to/ use of other services? • Access to aides/ devices?
Recommendation	• (**R4/5**) Would you recommend HCH for your other patients? If so, on what basis? If not, why not?
Anything else?	• Is there anything else that we haven't discussed that you would like to mention?

Topic guide – PHN interviews

Topic	Question
Introduction	• Introduction of researcher and describe the project and its purpose. • Outline: • Remind the participant(s) that participation is voluntary; that they do not have to take part, and that there will be no repercussions if they choose not to do so. • Describe what participation in the interview involves. • Remind the participant that they can withdraw from the interview at any time, and that they do not have to answer any further questions. • Outline confidentiality/anonymity provisions, that is, that the PHN and individuals responding on behalf of the PHN will not be named in any reporting of results to any parties. • Outline how the PHN will be informed of the results of the research when it is finished. • Provide details on who to contact in case of any or concerns or questions that may arise after the interview. • Seek permission to audio record the interview. • Check whether the participant(s) has(ve) any questions. • Seek verbal consent for participation.
Enablers and barriers for PHNs	• (**R2**) What factors contributed to you being able to effectively train practices and assist them in enrolment of patients in the program? • (**R2**) What factors have prevented you from effectively training practices and assisting them in enrolling patients in the program? Prompts: • Internal (within the PHN). • External (e.g. practice, training/ enrolment materials provided).

Topic	Question
	• (**R4/R5**) What would you do differently next time if you were to assist practices within your region to implement HCH or a similar model?
Enablers and barriers for practices	• What do you believe are the main factors that have helped the rollout of HCH amongst the practices in your PHN? • What do you believe are the main factors that have caused difficulties in rolling-out HCH amongst the practices in your PHN?
Practice features	• Out of the practices within your region implementing HCH, what are the features of the practices that you would consider successful in implementing HCH and/ or achieving the aims of the program? • What are the features of the practices that you consider not as successful?
Contextual information/ factors	• What changes/ initiatives, if any, are occurring/ have occurred not related to HCH that have impacted on the implementation of HCH within your region and/ or the impacts/ outcomes of HCH? Prompts: ◦ LHN changes/ initiatives. ◦ State/ territory changes/ initiatives. ◦ Availability/ withdrawal of community programs. ◦ Availability/ withdrawal of private health insurance programs.
Benchmark reports	• How did you use the reports that you received from Health Policy Analysis benchmarking practices within your PHN? • Were they useful for you? Why or why not? • How useful do you think the practice reports were? • Do you have any suggestions for how to make the reports more useful for your PHN and/ or for practices (e.g. frequency, content, comparisons)?
Future recommendation	• (**R4/R5**) Would you recommend further rollout of HCH beyond the trial? If so, what would the program look like? If not, why not?
Anything else?	• Is there anything else that we haven't discussed that you would like to mention?

Topic guide – LHN/ state and territory interviews

Topic	Question
Introduction	• Introduction of researcher and describe the project and its purpose. • Outline: • Remind the participant(s) that participation is voluntary; that they do not have to take part, and that there will be no repercussions if they choose not to do so. • Describe what participation in the interview involves. • Remind the participant that they can withdraw from the interview at any time, and that they do not have to answer any further questions. • Outline confidentiality/anonymity provisions, that is, that the LHN/ state and territory health authority and individuals responding on behalf of an organisation will not be named in any reporting of results to any parties. • Outline how the LHN/ state and territory health authority will be informed of the results of the research when it is finished.

Topic	Question
	• Provide details on who to contact in case of any or concerns or questions that may arise after the interview. • Seek permission to audio record the interview. • Check whether the participant(s) has(ve) any questions. • Seek verbal consent for participation.

Contextual information/ factors	• What changes/ initiatives, if any, are occurring/ have occurred not related to HCH that have impacted on the implementation of HCH and/ or the impacts/ outcomes of HCH within your state/ territory/ region?
	• Describe these changes/ initiatives.
	
	Prompts
	
	  • Initiating organisation(s).
	  • Target group(s).
	  • Aim(s) of the initiative.
	  • Time frame of implementation (start/ end).
	
	• How have the above changes/ initiatives impacted on practices participating in HCH and/ or enrolled patients?

Enablers and barriers for practices	• What do you believe are the main factors that have helped the rollout of HCH amongst the practices in your region/ state/ territory? • What do you believe are the main factors that have caused difficulties in rolling-out HCH amongst practices in your region/ state/ territory?
Practice features	For LHNs only: • Out of the practices within your region implementing HCH, what are the features of the practices that you would consider successful in implementing HCH and/ or achieving the aims of the program? • What are the features of the practices that you consider not as successful?
Future recommendation	• (**R4/R5**) Would you recommend further rollout of HCH beyond the trial? If so, what would the program look like? If not, why not?
Anything else?	• Is there anything else that we haven't discussed that you would like to mention?

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