Centre for Primary Health Care and Equity

Central and Eastern Sydney Primary and Community Health Cohort/Linkage Resource

2018 Research Priorities Forum Report

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The Central and Eastern Sydney Primary and Community Health Cohort/Linkage Resource is jointly funded by NSW Health Sydney Local Health District, NSW Health South East Sydney Local Health District and the Central and Eastern Sydney Primary Health Network. Current members of the management committee are Mark Harris (Chair), Margo Barr, Kathy Clinch, Elizabeth Comino, Deb Donnelly, Shona Dutton, John Hall, Liz Harris, Ben Harris-Roxas, Tony Jackson, Jane Lloyd, Belinda Michie, Kylie Vuong, Liam Shanahan and Heidi Welberry.

Abbreviations used in the document:
Australian Institute of Health and Welfare (AIHW); Aboriginal Medical Service (AMS); Aged Care Assessment Team (ACAT); Agency for Clinical Innovation (ACI); Central and Eastern Sydney (CES); Central and Eastern Sydney Primary Health Network (CESPHN); Central and Eastern Sydney Primary and Community Health Cohort/Linkage Resource (CES-P&CH); Centre for Primary Health Care and Equity (CPHCE); Commonwealth Home Support Programme (CHSP); Cultural and Linguistic Diverse (CALD) groups; Emergency Department (ED); General Practitioner (GP); Health Equity Research and Development Unit (HERDU); Home and Community Care (HACC); Local Health District (LHD); Language other than English (LOTE); Medicare Benefits Schedule (MBS); Non-admitted patient (NAP); Novel oral anticoagulants (NOAC); Pharmaceutical Benefits Scheme (PBS); Primary health care (PHC); Primary Health Network (PHN); Royal Australian College of General Practice (RACGP); Quality of life (QOL); South Eastern Sydney Local Health District (SESLHD); Socioeconomic status (SES); South Eastern Sydney Research Collaboration Hub (SEaRCH); Sydney Local Health District (SLHD).

Key outcomes from the forum

- The five research priorities identified were: (i) Aged care; (ii) Medication use; (iii) Social isolation; (iv) Interaction between physical/mental health care; and (v) Care coordination.
- Three to four specific research questions will be further developed for each research priority by researchers at Centre for Primary Health Care and Equity (CPHCE), with assistance from forum participants as required.
- Each of the proposed questions will be developed so that they are relevant to primary health care in Central and Eastern Sydney (CES), have a policy relevance, and are able to be answered using the Central and Eastern Sydney Primary and Community Health Cohort/Linkage Resource (CES-P&CH).

Introduction

The Central and Eastern (CES) Research Priorities Forum, held on 22 March 2018 in Sydney NSW, was organised by the CPHCE, at the University of NSW in collaboration with South Eastern Sydney Local Health District (SESLHD), Sydney Local Health District (SLHD) and Central & Eastern Sydney Primary Health network (CESPHN).

The aim of the Research Priorities Forum was: to build on the CES primary and community health research priorities identified at the previous workshop (March 2016) and the pre-forum workshops conducted with the partners; to have a shared understanding of the CES-P&CH including past achievements and future opportunities to answer questions relevant to CES; and to inform a program of work using the CES-P&CH for 2018 and beyond. The CES-P&CH includes: questionnaire (45 and Up Study managed by the Sax Institute) and administrative data (hospitalisations, emergency department, primary health, prescriptions, cancer registry, deaths, and mental health data) on 264,732 participants in NSW and 30,645 in CES area (20,337 in SESLHD and 10,308 in SLHD); and umbrella ethics approval until 2021 for mutually agreed health-service relevant research.

Invitations were sent to the appropriate SESLHD, SLHD, CESPHN, and NSW Ministry of Health staff. Key research and non-government organisation partners were also approached for representation at the workshop including UNSW Faculty of Medicine, George Institute, Australian Institute of Health and Welfare (AIHW), Royal Australian College of General Practice (RACGP) and Sax Institute. Thirty-one participants attended the forum, of which half were from the partner organisations (see Appendix 1 for the list of participants). The day was divided into three sessions: presentations to set the scene, identification and development of the research priorities; and bringing it all together.

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Session 1: Scene setting

Prof Mark Harris, who chaired the half day forum, welcomed participants to the day and highlighted the strengths of the existing networks and the importance of such forums in developing research priorities.

Progress to date

A/Prof Margo Barr, CES-P&CH Project Leader at CPHCE, provided information on progress to date and future opportunities using the resource. She also provided an overview of the research priorities identified at the 2016 workshop and through the partner pre-forum workshops.

The broad topics that were identified from the workshops were:

1. Care systems
2. Medications
3. Chronic disease care
4. Demographics and environment
5. Mental health
6. Hospitalisations
7. Carers
8. Immunization
9. Falls

Keynote

Prof Jean-Frédéric Levesque, the Chief Executive of the NSW Agency for Clinical Innovation (ACI), provided the keynote presentation on data linkage to support local planning and evaluation. His presentation included information on:

- Data linkage to support knowledge and action
- Research applications using data linkage
- Potential research questions

The data linkage to support knowledge and action component included: linking data sources; cohort identification; use for outcome measurement; risk-adjustment and attribution. The research applications using data linkage component included chronic diseases and co-morbidity examples for cohort identification; emergency department (ED) crowding and mortality for outcome measurement; predictive risk modelling for risk adjustment; and primary health care (PHC) organisation and specialist co-management for attribution.

Possible research questions suggested by Prof Levesque were: Who are your high-risk users? What are the types of high-risk users? What is the experience of care of high-risk users? Are high-risk users explaining differences in utilisation of services? and Are some providers/facilities curbing their high-risk user utilisation?

Landscape and partner priorities

Each of the partner organisations then presented on their primary health care/health care integration priorities and current issues. These were given by:

- Dr Greg Stewart, Director, Primary and Integrated Health for SESLHD
- Ms Miranda Shaw, A/Executive Director, Clinical Services Integration & Population Health for SLHD
- Dr Shona Dutton, Health of Planning, Strategy & Evaluation for CESPHN.

The presentations are summarised in Table 1.

Table 1: Summary of the primary health care/health care integration priorities and current issues for SESLHD, SLHD and CESPHN.

SESLHD	SLHD	CESPHN
About/Integrated Care Landscape		
• Considering CES enables collaboration across Local Health District (LHD) boundaries. • Integrated care encourages communication about people with chronic conditions. • Promotes an exploration of how complexity science may be usefully applied to health.	• Population covered by SLHD live in areas with high housing density (most boarding houses of any LHD, areas below national socioeconomic status (SES) average). • SLHD area: 0.9% Aboriginal people, 43% speak a language other than English (LOTE) at home, 8% low English proficiency. • Area experiencing rapid population growth (particularly older age).	CESPHN strategic priorities are to: • improve health outcomes & address health needs • support primary healthcare professionals and services • work with strategic partners to facilitate seamless person-centred care.
Key strategies/initiatives		
Key SESLHD integrated care strategies: • engage with people and communities through person centered planning and evaluation • develop a Health Intelligence system • use innovative models to target areas of need • utilise central support structures to evaluate, transfer and spread successful models.	Key SLHD integrated care activities: • Healthy Homes & Neighbourhoods • Living Well Living Longer • Health Pathways • HealthOne in Green Square, Planning also for a HealthOne in Canterbury • partnership with the Aboriginal Medical Service (AMS) Redfern • various inter-sectoral initiatives • Co-location of services, (e.g. - 'RedLink').	The eight CESPHN priority areas are: • Mental Health • Drug & Alcohol • Population Health • Aboriginal & Torres Strait Islander Health • Workforce • After Hours • Aged Care • Digital Health.
Priorities/CES P&CH use		

• CES-P&CH is a great resource with so much that you can do.
• Use to answer things we don't already know.
• Don't just focus on what is possible but instead on what is needed.
• Main priorities for SESLHD are:
  ○ whole of system change
  ○ priority populations
  ○ oral health.
	Priorities and opportunities include:
	• primary health care access - various cohorts
	• health inequalities amongst people with severe mental illness
	• addressing social isolation and related health outcomes
	• ageing in the urban environment
	• impact and access
	• evaluation and scaling-up of innovative models of integrated care
	• evaluation of inter-sectoral initiatives
	• improved access to screening or assessment.
		• Research products will include: data regarding health service use, patterns of hospitalisation and insight into integration and coordination of care, directly informing population health planning and service commissioning.
		• Opportunities exist for primary care research to have a central role in improving many of the current challenges faced by the health system.
		• Research priorities include: potentially preventable hospitalisations, unwarranted clinical variation, length of stay, and discharge by 11am.

Slides from the presentations are available at https://cphce.unsw.edu.au/news-events/news/2018/05/research-priorities-forum-research-priorities-central-and-eastern-sydney

Session 2: Research priority development

The two small group sessions, facilitated by A/Prof Margo Barr and A/Prof Elizabeth Comino from CPHCE, were conducted in the second half of the morning. The aims of the sessions were to develop broad research themes, research priorities within those themes and to see how the CES-P&CH could be used to address them**.**

The Research Priorities Matrix was provided which included a summary of ideas/questions identified at the 2016 workshop and during the partner pre-forum workshops (see Appendix 2). From the pre-forum workshops it was identified that all partners had an interest in Care Systems and Medications and at least 2 partners were interested in Demographics/ Environment and Mental Health.

As part of the forum discussion 'Models of care' was identified as another broad theme of importance. So, the six broad themes that were discussed and from which the research priorities were developed were: (i) Care systems, (ii) Medications, (iii) Chronic disease care, (iv) Demographics and environment, (v) Mental health and (vi) Models of care.

See Appendix 3 for the discussions around the broad themes and the research priorities that were identified.

Participants were then given the opportunity to add additional research priorities for consideration that either were not included at during their small group discussion or were for a different research theme. Additional individual priorities included:

- oral health
- inclusion of carer support
- medications – post discharge management and impact on readmissions
- health literacy and generic medicines – potential for over/under medication
- identification and management of obesity in people with chronic disease
- shared care planning - according to LOTE and Cultural and Linguistic Diverse (CALD) groups
- role of pharmacy/pharmacist in PHC/prevention
- ensure models of care includes general practice (GP) at relevant policy levels and financial models - according to LOTE and CALD.

See Appendix 3 for more details.

Each participant was given one sticker to vote on the research priority that was most important to them. The Research Priorities that had the highest number of participant votes were unpacked to see if the CES P&CH could be used to answer questions within these research priority areas. Those chosen were:

- aged care: What has been the impact of reforms on health service utilisation? and How do we realign service provision with patient need? (BROAD THEME: Care systems)
- appropriate v inappropriate medication use – guideline concordance (BROAD THEME: Medications)
- trajectories to indicate early intervention need – does SES predict (BROAD THEME: Chronic disease care)
- differences in service use, medication use and health outcomes – CALD groups in CES v NSW v non CALD (BROAD THEME: Demographics and environment)
- mapping patient journey across LHD and specialist services (BROAD THEME Models of care).

Applying the traffic light approach i.e. GREEN what can be done now using CES-P&CH; AMBER what is possible but needs more data/resources and RED what is not possible. As part of this process the research priorities could be modified and/or split. Some of the specific research question that were identified that could be answered now using the CES-P&CH included:

- Is admission to residential care by people with dementia preceded by increased presentation to ED or use of support services?
- What medications are being prescribed in CES?
- Does medication non-compliance predict unplanned hospital admissions?
- What is the impact on hospitalisation/ED presentation when patients are prescribed novel oral anticoagulants (NOAC) compared to warfarin?
- For people with chronic conditions; do social determinants impact on timeliness of medications following hospital discharge?
- Is the 45 and Up Study cohort representative of CALD groups in the CES area?
- What is the impact of social isolation, particularly for CALD groups, on service needs and use?

See Appendix 4 for more details.

Additional datasets that were identified as being useful into the future included:

- ***my****aged**care* data
- Aged Care Assessment Team (ACAT) data
- interpreter data from within hospitals
- non-admitted patient (NAP) data which is not yet available
- medication data from hospital or NAP
- patient stories
- more quality of life data
- Home and Community Care (HACC) data which is not currently part of the resource.

Session 3: Bringing it all together and next steps

The final session of the day included a panel session, summary of the day and information about what is next. The panel included Prof Jean-Frédéric Levesque, Dr Greg Stewart from SESLHD, Ms Miranda Shaw from SLHD, Dr Shona Dutton from CESPHN and A/Prof Margo Barr from CPHCE. The chair asked the panel members to either comment overall on the research priorities that had been developed and how they align with the priorities of their organisations or to comment on the challenges and opportunities from a research perspective. Comments from the panel/discussion included:

- CES-P&CH is a great resource with so much that you can do, particularity to answer things we don't already know and to focus on what is needed.
- Priority should be given to research projects that focus on whole of system change.
- Research priority development is new ground for CESPHN. Moving from passive to active involvement in projects that they are funding partners on.
- Need for a cluster of questions regarding re frailty and polypharmacy. Specifically, need to better quantify types of services received.
- CES-P&CH includes the possibility of starting at an endpoint and looking backwards.
- Important to understand outcomes; competing outcomes, how outcomes drive policy.

- Good to have a full description of use of health services for someone at the edge of vulnerability.
- Would be good to use CES-P&CH to examine consistency of care and who is at risk of getting uncoordinated care.
- Need for more background information to better understand care and care needs.

Prof Mark Harris then thanked the speakers and the attendees and stated that this was not the end of the journey to identify the research priorities but rather the beginning. He also stated that the information from the forum would be summarised and considered by the management group to develop a program of work using the CES-P&CH for 2018 and beyond.

Management group synthesis of the days and plan for finalisation

The management group considered the outcomes of the day and the different ways that the resultant themes and research priorities could be considered including: health conditions (diabetes, mental illness, oral health), settings (urban environments, health care in the home), demographics (NESB, SES, disability), points of interventions (prevention, acute, transitions between) or cross cutting themes (health literacy, appropriate access to health care and health inequalities).

The management group decided that the five main priority areas that resonated most from the forum and the pre-meetings were: (i) Aged care, (ii) Medication use, (iii) Social Isolation, (iv) Interaction between physical/mental health care and (v) Care coordination. See updated matrix that includes the outcome of the forum as well as the pre-meetings and the previous workshop (Appendix 2).

Three to four research questions will be developed for each of these priority areas by a researcher at CPHCE with each of the proposed questions needing to address the following questions to be considered further:

- Is it relevant to PHC in CES? Why? Why not all of NSW?
- What is the policy relevance?
- Can we do it using CES-P&CH?
- What is already known?

A standard template will be used to summarise the proposed research questions within each theme. These summaries will then be considered firstly by the management group and then more broadly by the partners.

A decision will be made for each of the proposed questions to recommend:

- no further exploration
- including exploration of the research question in the 2018-2020 workplan for 2018
- work towards including the research questions the workplan in subsequent years once new data/further analysis is completed.

Results of the participant evaluation

An evaluation sheet was distributed to participants and about half (12) of all attendees completed the evaluation.

The evaluation included three questions:

1. How useful was the CES Research Priorities Forum?
2. How relevant was the CES Research Priorities Forum?
3. Did the CES Research Priorities Forum meet your expectations?

Participants could also provide general comments.

The evaluation form was anonymous however participants were able to provide us with their name and email address if they wanted us to know who provided the comments and/or were happy to be followed up. Six (50%) participants took up this offer.

The responses are summarised in the table below.

Question on	**Responses**
1. Usefulness	100% very useful Comments included: very useful range of issues and research priorities; good to see other priorities; useful to be introduced to the process; good opportunity to generate ideas and network; stimulating brainstorming exercise; very timely; great jumpstart to the next phase.
2. Relevance	95% very/highly relevant Comments included: gives direction; identified useful collaborations; relevant to health pathways; endless possibilities.
3. Meet expectations	100% yes Comments included: needed more time to discuss priorities; very thought provoking and useful; good opportunity to listen, discuss and identify priorities; would like more info on next steps.
4. General comments	Need to see if 45 and Up Study cohort is right resource for some of the priorities identified; networking opportunity; good initiative; need for a mechanism for other UNSW researchers to become part of the consortium to access the resource and minimise duplication; follow-on targeted meeting by specific research priority; very well organised.

Appendix 1 List of attendees

Name	Position	Centre/Section	Organisation
Sue Baker	Project Officer, Healthpathways	Primary and Integrated Care	South Eastern Sydney LHD
Margo Barr	Associate Professor	Centre for Primary Health Care and Equity	University of NSW
Mark Bartlett	Manager Analysis for Policy program	Analysis for Policy Program	Sax Institute
Patrick Bolton	Director, Clinical Services Medical	Prince of Wales Hospital	South Eastern Sydney LHD
Richard Broome	Director	Public Health Observatory	Sydney LHD
Magnolia Cardona	Senior Research Fellow	South West Sydney Clinical School	University of NSW
Katherine Clinch	Manager Aged Care Strategy	Primary Integrated & Community Health	South Eastern Sydney LHD
Elizabeth Comino	Associate Professor	Centre for Primary Health Care and Equity	University of NSW
Elizabeth Denney-Wilson	Professor of Nursing	Nursing and Midwifery	Sydney LHD and Sydney University
Shona Dutton	Health of Planning, Strategy & Evaluation	Strategy & Evaluation	Central and Eastern Sydney PHN
Michael Falster	Research Fellow	Centre for Big Data Research in Health	University of NSW
Julie Finch	Chronic Care Program Manager	Aged, Chronic Care and Rehabilitation Services	Sydney LHD
Sharryn Fitzgerald	Manager Healthpathways	Primary and Integrated Community Health	South Eastern Sydney LHD
Michael Frost	Group Head	Communications and Primary Health Care Group	Australian Institute of Health and Welfare
Mark Harris	Executive Director	Centre for Primary Health Care and Equity	University of NSW
Elizabeth Harris	Associate Professor	Centre Primary Health Care and Equity	University of NSW
Ben Harris-Roxas	Director, South Eastern Sydney Research Collaboration Hub (SEaRCH)	Centre for Primary Health Care and Equity	University of NSW
Tony Jackson	Deputy Director	Primary Integrated and Community Health	South Eastern Sydney LHD
Min Jun	Senior Research Fellow	Renal & Metabolic Division	George Institute
Jean-Frédéric Levesque	Chief Executive Officer and Professor	Agency of Clinical Innovation	NSW Health
Jane Lloyd	Director, Health Equity Research and Development Unit (HERDU)	Health Equity Research and Development Unit	Sydney LHD and University of NSW
Bette Liu	Associate Professor	School of Public Health and Community Medicine	University of NSW

Name	Position	Centre/Section	Organisation
Renee Moreton	A/General Manager	Population Health	Sydney LHD
Cathy O'Callaghan	Learning and Workforce Program Manager	Multicultural Health Service	South Eastern Sydney LHD
Julie Osborne	Manager Integrated Care Unit	Primary Integrated and Community Health	South Eastern Sydney LHD
Claire Phelan	Director	Oral Health	South Eastern Sydney LHD
George Rubin	Associate Medical Executive Director	School of Public Health and Community Medicine and Medical Directorate	University of NSW and South Eastern Sydney LHD
Miranda Shaw	A/Executive Director, Clinical Services Integration & Population Health	Clinical Services Integration & Population Health	Sydney LHD
Greg Stewart	Director	Primary Integrated and Community Health	South Eastern Sydney LHD
Heidi Welberry	Data analyst/ Project manager	Centre for Primary Health Care and Equity	University of NSW
Chris White	Research Director	Medical Directorate	South Eastern Sydney LHD
Margaret Williamson	Research Fellow	South West Sydney Clinical School	University of NSW

Appendix 2: Research priorities matrix including 2018 forum, partner pre-workshop meetings and 2016 workshop

Broad Topics	March 2018 Research Priorities Forum		Partner pre-workshops			March 2016 workshop
	Research Priorities	**Possible questions/topic**	**SLHD**	**SESLHD**	**CESPHN**	
Care systems	Residential Care		Accessibility to National Disability Insurance Scheme (NDIS) and other disability services	Impact on future service use; what are the predictors of service use amongst over 75 people, including location	Evaluation of Health Pathways	Are the levels of disease management fitting with primary and community care systems?
	Aged Care: What has been the impact of reforms on health service utilisation? How do we realign service provision with patient need?	Is admission to residential care by people with Dementia preceded by increased presentation to ED or use at support services? Gaining a better understanding of medication usage data	Accessibility to Australian government services including the patterns of access and the mix between public and private services	Can check if people are seeing the same or different service providers		Are certain organisations/clinics better at managing care?
	Health pathways: Has it influenced health service use or patterns of care?		Transition to residential care	What happens before and after a care plan – looking broadly, why aren't reviews being done, understanding what's going on		
			Accessibility issues to vulnerable populations	Investigate what we can understand about users of non-allied health and Commonwealth Home Support Programme (CHSP) nursing services and impacts on service use		

Broad Topics	March 2018 Research Priorities Forum		Partner pre-workshops			March 2016 workshop
	Research Priorities	**Possible questions/topic**	**SLHD**	**SESLHD**	**CESPHN**	
	Additional individual priorities: • Oral health • Inclusion of carer support			What predicts Medicare Benefits Schedule (MBS) item use for carers? Carers – patterns of service use and MBS compared with non-carers		
Medications	**Appropriate v inappropriate medication use – guideline concordance**	Look back at 1 year prior to unplanned admissions for medication errors - look at what drugs patients got or did not get, when they got it, concordance Evaluate programs i.e. Medication review - impact on hospitalisation/ED; NOAC vs warfarin	Polypharmacy and how this has affected hospitalisations or different patterns of GP attendance	Patterns of use before a presentation	Polypharmacy	Link polypharmacy & adherence to other issues going on for person
	Patterns of new drug use		Multiple prescribing	Polypharmacy – info from 45 and up Study, cross-linked with Pharmaceutical Benefits Scheme (PBS) data		Medication related preventable hospitalisations, can explore specific medications and consequences
	De-prescribing					Look at what drugs people are taking and are we able to understand they need to take

Broad Topics	March 2018 Research Priorities Forum		Partner pre-workshops			March 2016 workshop
	Research Priorities	Possible questions/topic	SLHD	SESLHD	CESPHN	
	Additional individual priorities: • Medications post discharge (are new scripts filled); Impact on readmissions (polypharmacy) • Health literacy and generic medicines – potential to over/under medication					
Chronic disease care	Over/under utilisation of chronic disease services		Connectedness vs isolation – a big risk factor for chronic illness			Where are people going for their chronic disease care?
	Trajectories to indicate early intervention need – does SES predict **Pharmaceuticals – use, compliances**	For people with chronic conditions with regard to date of discharge for hospital and date filling script for new medications is there a difference when considering social determinants?				Does visiting GPs for chronic care result in reduced hospitalisations and what is it about the quality of the care received?
	Risk SES stratification – identify risk relevant to need					

Broad Topics	March 2018 Research Priorities Forum		Partner pre-workshops			March 2016 workshop
	Research Priorities	Possible questions/topic	SLHD	SESLHD	CESPHN	
	Additional individual priorities: • Identification and management of obesity in people with chronic disease • Shared care planning - According to LOTE and CALD					
Demographics and environment	**Differences in service use. Medication use and health outcomes in CALD groups in CES v NSW v non CALD**	Benchmark the CALD group in 45 and Up Study against known population estimates for CES area Social isolation, in particular in CALD groups, and impact on service needs and use	Ageing in the urban environment – are people moving, staying in place, are there accessibility issues to green spaces, GPs?			
	Ageing in the urban environment – who you live with, quality of life, social isolation, age in place, health service access and usage		A deeper look at socioeconomic and demographic issues between South East Sydney and Sydney LHDs	Segmenting further/disaggregation – major language groups, region of origin; building this into every analysis or as many as possible		
Mental health	Differentiating sub-cohorts based on severity/persistence of mental illness and patterns/trajectory of service use		General health morbidity for those accessing specialist mental health services		Mental health	

Broad Topics	March 2018 Research Priorities Forum		Partner pre-workshops			March 2016 workshop
	Research Priorities	Possible questions/topic	SLHD	SESLHD	CESPHN	
	Impact of physical health services/items such as oral health, mental, illness, management, women's health on mental health service use					
Models of care	**Mapping patient journey across LHD and specialist services**	Define outcomes (good v bad) for mental health, aged care – need to be prioritised Are some pathways of care more effective than others?		What do we know about frequent hospital users, how did they become frequent users, "what happened on the way up?" to become frequent users – getting to a predictive model	Practice Nurses and impact on immunization rates	
	Care planning for general practice and LHD services					
	Case conference Aged Care, Mental Health, Drug and Alcohol Examine outcomes ie ED attendance and hospital utilisation					
	Additional individual priorities: • Oral health					

Broad Topics	March 2018 Research Priorities Forum		Partner pre-workshops			March 2016 workshop
	Research Priorities	Possible questions/topic	SLHD	SESLHD	CESPHN	
	• Role of pharmacy/pharmacist in PHC/ prevention • Ensure models of care includes general practice at relevant policy levels and financial models - according to LOTE and CALD					
Falls						Who has not reported a fall and are there protective factors?
						Explore the association between self-reported falls and: social factors or mental health indicators or use of physiotherapists
						Can the settings of falls a (but not able to from 45 and Up Study survey) help target prevention/promotion materials

NOTE: Research Priorities in ***bold italics*** were those discussed at the forum for which research questions/topic areas were developed.

Appendix 3: Results of the research priorities small group development exercise at the forum

Theme	Notes from the Discussion	Research Priority 1	Research Priority 2	Research Priority 3	Additional individual priorities
Care systems[1]	• Ageing population; Large % of the population • Local impact of national aged care reform • Falls, fragility, dementia • Priority because high incidence and difficulty navigating the system • Priority because of the complexity of the system – need to know if this is contributing to improvements	Residential care	**Aged care: What has been the impact of reforms on health service utilisation? How do we realign service provision with patient need?**	Health pathways Has it influenced health service use or patterns of care?	• Oral health • Inclusion of carer support
Medications[2]	• Cascade of medications • Heart failure, Acute myocardial infarctions, lipid lowering drugs for blood pressure, antithrombotic drugs • Check re under co-payment • Private scripts • Geriatrics/nursing homes • Equity may be an issue because of expense • Polypharmacy • Specific drug classes; high risk combinations; outcomes	**Appropriate v inappropriate medication use – guideline concordance**	Patterns of new drug use	De-prescribing	• Medications post discharge (are new scripts filled); impact on readmissions (polypharmacy) • Health literacy and generic medicines – potential for over/under medication
Chronic disease care[3]	• Can't think in isolation; other relevant issues – oral health, mental health, social determinants • Medication compliance • Complexity of care systems • Experience of care by high use patients – over users, fragmentation • Frequent flyers to ED • Trajectories to early interventions • Pharmacy monitoring of prescription being filled • Are right people getting the services	Over/under utilisation of chronic disease services	**Trajectories to indicate early intervention need – Does SES predict** **Pharmaceuticals – use, compliance**	Risk SES stratification – identify risk relevant to need	• Identification and management of obesity in people with chronic disease • Shared care planning - according to LOTE and CALD group

Theme	Notes from the Discussion	Research Priority 1	Research Priority 2	Research Priority 3	Additional individual priorities
Demographics and Environment[4]	• Interest in social, cultural and environmental determinants of health and health service use • Cohort not representative in terms of CALD groups • Of note SLHD has grown more rapidly since 2006 – perhaps cohort in SLHD less representative now • Intersection of vulnerabilities • Trajectory of chronic disease progression and health service use and the intersection of vulnerability • CALD communities are an important part of CES, but we don't know how cultural factors relate to health services use and health outcomes • CES is a highly urban environment • Describing cultural factions is difficult (e.g. country of birth (COB) v language v ancestry v combination of)	**Differences in service use. Medication use and health outcomes in CALD groups in CES v NSW v non CALD**	Ageing in the urban environment Who you live with; Quality of life; Social isolation…age in place; Health Service access and usage		
Mental health[5]	• Intersection of ideas – client perspective, quality of life (QOL), distinction between decision and behaviour - assumptions about care etc. • Identifiers of more serious mental issues • Ways of describing patterns of service use • Mental health as examples/model of chronic disease care – lessons; biomedical model • Informing development of shared care models for mental health • Comorbidity based on community data in CES (e.g. QOL, predictors of deterioration, PHC gaps) • Informing the next refresh of 45 and Up Study cohort/related studies as influences and experiences have changed	Differentiating sub-cohorts based on severity/persistence of mental illness and patterns/trajectory of service use.	Impact of physical health services/items such as oral health, mental, illness, management, women's health on mental health service use		

Theme	Notes from the Discussion	Research Priority 1	Research Priority 2	Research Priority 3	Additional individual priorities

Models of Care[6]	• How does the broader research agenda relate to model of care?
	• Many services delivered without any evidence of effect and dollars being wasted; models that do work should be resourced
	• Using real life examples to inform decisions
	• How do people work together?
	• Demonstrating benefits gained through working together across disciplines (e.g. geriatric, flying squad)
	• Look at what services patients in 'House of care model' connect to
	• Map how services connect together? GP and mental health and aged care - tracking patients in cohort and what care they get from GP and broader patient journey
	• What models of care coordination to use?
	• Unpack LHD role - commission services; upskill practice nurses in care planning
	• Sustainability of Health Care Homes
	• Do we want to consider conditions (who gets what) or specific populations?
	• All about chronic care? - People with diabetes, people with chronic comorbidities
	• HealthOne model:
	  ○ Consider services– identify cohort sub-pop and track range of services utilize
	  ○ US evidence tells us works for chronic disease and certain areas of preventive care (e.g. bowel screening)
	  ○ Model offers shared info systems, working together as a team, managing an enrolled population, population at particular risk
		Mapping patient journey across LHD and specialist services	Care planning for general practice and LHD services	Case conference aged care, mental health, drug and alcohol
				
				Examine outcomes i.e. ED attendance and hospital utilisation
					• Oral health
					• Role of pharmacy/pharmacist in PHC/ prevention
					• Ensure MOC includes general practice a d relevant policy levels and financial models - According to LOTE and CALD

Theme	Notes from the Discussion	Research Priority 1	Research Priority 2	Research Priority 3	Additional individual priorities
	○ What can cohort tell us about how to design green square model? ○ Risk that it becomes a building to house disparate service – building a mini-hospital rather than making system improvements ○ intending to alleviate burden on primary care particularly as related to complex patient cohorts (e.g. drug and alcohol, mental illness) ○ Concern model purely about hospital avoidance ○ Will general practice be included in HealthOne model? • Noting absence of NAP data - limitation (may be available in 1-2 years) • MBS care planning data and consider existing shared care plan clients with mental illness. • Unable to pull referral data to public hospital services • Could we use this as an opportunity to 'purchase care coordination by practice nurses' from collection of private health insurances, Primary Health Networks (PHN), private practitioners • Mapping care in specialist and primary care - who gets care planning in both systems, case conferencing, health outcomes for cohort • Consider amount of case review occurring now - in general across services, but also between mental health services, GPs, aged care and drug and alcohol				

Table facilitators were: (1) A/Prof Liz Harris; (2) Ms Heidi Welberry; (3) A/Prof Elizabeth Comino; (4) A/Prof Jane Lloyd; (5) A/Prof Ben Harris Roxas; (6) Prof Mark Harris.

Appendix 4: Results of the research priorities small group traffic light exercise at the forum

Broad Theme	Specific Research Priority	Discussion/Refinement	Green	Amber	Red
Care systems[1]	Aged Care: What has been the impact of reforms on health service utilisation? How do we realign service provision with patient need?	• Health pathways have established pathways for dementia. Limitation in measuring access to Health pathways. • Re dementia: interested in understanding dementia including pathways for management • Interest in understanding impact of aged care reform • Cost of aged care is prohibitive • Medication usage • Intersects with a number of the other themes including chronic diseases and medications	***Possible question***: Is admission to residential care by people with Dementia preceded by increased presentation to ED or use at support services? Summary of medication usage data	Resource currently does not include ***my****aged**care* and ACAT data	
Medications[2]	Appropriate v inappropriate use – guideline concordance	• Data sources include - self reported use (questionnaire) and PBS • Assume that patients would be discharged on right medication • Non-compliance - not taking drug for condition • Interactions - drug-drug, disease-drug • Third of unplanned admissions due to drugs • Aged care: reduce poly pharmacy	***Possible question****:* Look back at 1 year prior to unplanned admissions for medication errors - look at what drugs patients got or did not get, when they got it, concordance ***Possible question****:* Evaluate programs i.e. medication review - impact on hospitalisation/ED; NOAC vs warfarin	Limitation: no medication data from hospital or NAP	
Chronic disease care[3]	Trajectories to indicate early intervention need – SES do these predict Pharmaceuticals – use, compliances	For people with chronic diseases: • Links to social determinants distribution and impact of • opportunities for early intervention • understanding pattern • link to medication to examine adherence – filled prescriptions post discharge and readmission (discharge date and date prescription fill date; 5-day window)	***Possible question***: For people with chronic conditions with regard to date of discharge for hospital and date filling script for new medications is there a difference when considering social determinants?		Need patient stories

Broad Theme	Specific Research Priority	Discussion/Refinement	Green	Amber	Red
Demographics and Environment[4]	Differences in service use, medication use and health outcomes in CALD groups in CES v NSW v non CALD	There is concern that the sample of CALD participants within the 45 and Up Study is not representative of the CALD population within CES due to the requirement to fill the questionnaire out in English However, not much is known about exactly how representative or unrepresentative the sample is for CES Once addressed could examine social isolation and needs of population with low English proficiency	***1A. Benchmark the CALD group in 45 and Up Study against known population estimates for CES area.*** The results of this study will enable us to determine whether the current sample within 45 and Up is useful for informing policy and practice in the area and in which ways ***1B. Social isolation in particular CALD groups and impact on service needs and use.*** This study would identify a cohort of people within CES classified as CALD (possibly following project 1). It would then develop methods for describing and exploring social isolation to quantify the level of social isolation within these groups and also the potential impact this has on access to services. The results of this study may identify particular groups at risk of social isolation and the relationship between social isolation and service use	***Needs of the CALD population with low English proficiency*** Link in data about use of Interpreters within hospitals to identify a subset of the population with low English proficiency This would be a new linkage dataset	

Broad Theme	Specific Research Priority	Discussion/Refinement	Green	Amber	Red
Models of Care[5]	Mapping patient journey across LHD and specialist services	• Hospitalisations; ED presentations • Need to understand the journey and the endpoint • To create better models of integration/cooperation (e.g. HealthOne – more sophisticated facility/service planning) • Understand pathways/communication • Avoiding costs • Are some pathways more effective than others (control groups/comparisons)? • Outcomes cost, mortality, presentations	Define outcomes (good v bad) – mental health, aged care – need to be prioritised	HACC not currently part of the resource	QOL, NAP data not yet available

Table facilitators were: (1) Dr Shona Dutton; (2) Prof Mark Harris; (3) A/Prof Jane Lloyd; (4) Ms Heidi Welberry; (5) A/Prof Ben Harris-Roxas.