

| LEAD INVESTIGATOR | INSTITUTION | PROJECT TITLE | STATUS | SUMMARY OF FINDINGS AND IMPACT ON GENERAL PRACTICE |
|---------------------------|--------------------------------|---|-------------------------|---|
| A/Prof Christine Phillips | Australian National University | Who uses guidelines when in general practice? A naturalistic decision analysis | Completed February 2015 | <ul style="list-style-type: none"> – This study explored how doctors and nurses in general practice use guidelines for chronic disease. It attempted to capture the decision-making processes that clinicians use in real clinical cases. – The insights from this study were used to develop a narrative analytical framework to analyse 66 primary care guidelines for chronic disease on the NHMRC portal, exploring the features that supported consistent, considered use of guidelines by clinicians. – The first part of this study showed that nurses and doctors hold mental models of the “correct way” to approach chronic diseases, including COPD-X, diabetes, chronic heart failure and chronic kidney disease. These mental models were generally consistent with the actual guidelines, even for those who said they were unfamiliar with the guideline. – Clinicians tended to concur with the guidelines for all chronic diseases, with agreement rates ranging from 78-89% across the four guidelines. Clinicians tend to adapt the guidelines rather than deviate. Decisions to deviate were consciously made, usually in response to the immediate context of the patient, or to respond to limitations of access to certain services. – In contrast to doctors, for whom contextualisation and adaptation are the hallmark of good clinical practice, nurses tended to adopt a target-driven, operational approach to employing guidelines. – The second part of this study, which focussed on the guidelines themselves, found that few guidelines were readily accessible for GPs in consultations, and that the focus on treatment and diagnosis was closely followed by a focus on advice to refer to specialists, possibly indicating the perspectives and priorities of the designers of the guideline. – The team concluded that good guidelines are constructed with clear, simple language, and if their purpose requires clinicians to access them repeatedly, they must be integrated into software, or smartphone app. While requesting simplicity, clinicians are also suspicious of guidelines that are not clearly aligned to evidence. |

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| Prof Mieke van Driel | University of Queensland | The ChAP Study: Changing the Antibiotic Prescribing of General Practice Registrars through better adherence to Antibiotic Guidelines | Completed November 2015 | <ul style="list-style-type: none"> – Over-prescription of antibiotics results in antibacterial resistance, which is a major threat to health worldwide. Most antibiotic prescription occurs in general practice and respiratory tract infections are the most common reason for prescribing. Changing antibiotic prescribing habits of established doctors is difficult. – Targeting interventions at GPs early in their careers, while they are still in training, could be a better way to promote more rational prescribing in the future. – This study developed a practicable real-world educational intervention to reduce inappropriate antibiotic prescribing for non-pneumonia respiratory infections. – This consisted of an online education module followed by a face-to-face workshop with registrars and also with GP supervisors. – This study compared GP registrar antibiotic prescribing in those who participated in the intervention to those who were not offered the intervention. – The study found a statistically and clinically significant reduction in prescribing of antibiotics for acute cough (bronchitis and bronchiolitis) but not for antibiotic prescribing for the common cold, which was relatively low to start with. – Integrating this module into training of future GPs and their supervisors has the potential to result in more rational use of antibiotics and reduced antimicrobial resistance in the community. – ChAP is the first study to explore the effect of interventions aimed at rational use of antibiotics in GPs in vocational training in Australia and worldwide. Important also, is inclusion of the GP supervisors as they often function as role models for future practice habits. – Although the results are promising, ChAP suggests that rational use of antibiotics should be addressed even earlier in the medical training pathway, as prescribing rates were already quite high in these early career doctors. |

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| Prof Mieke van Driel | University of Queensland | The ChAP Study: Changing the Antibiotic Prescribing of General Practice Registrars through better adherence to Antibiotic Guidelines | Completed November 2015 | <ul style="list-style-type: none"> – The ChAP study is a next step in an ongoing program of work focused on antibiotic prescribing for Chief Investigators van Driel and Magin. This has enabled them to better understand GP antibiotic prescribing in Australia, making use of strong international links with the successful INTRO study in Europe. |
| A/Prof David Peiris | The George Institute for Global Health | HealthTracker: a clinical decision support system for translating multiple chronic disease guidelines into practice | Completed March 2016 | <ul style="list-style-type: none"> – Despite many evidence-based guidelines to prevent and manage cardiovascular diseases, diabetes and chronic kidney disease causing the highest number of deaths worldwide, these guidelines are increasingly complex, frequently updated and difficult to implement for busy health professionals when discussing care with patients. – This study developed HealthTracker to address this problem – a primary healthcare decision support tool to make guideline recommendations more accessible during routine clinical encounters. – The team worked with disease and information technology specialists to develop a validated algorithm for management and prevention of cardiovascular diseases, atrial fibrillation, diabetes, and kidney disease. – The application was integrated with multiple GP software systems via the Pen Computer Systems Top Bar application and the team assessed its usability with GPs. – The team have now secured additional funding to collaborate with Primary Health Networks to implement the expanded HealthTracker in general practices in the Sydney region as part of a quality improvement strategy to improve the management and prevention of common chronic conditions. |

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| Prof Tania Winzenberg | University of Tasmania | Making guidelines meet the challenge of multimorbidity in general practice: development of an evidence-based approach to integration of disease specific guidelines to better manage multimorbidity | Completed March 2017 | <ul style="list-style-type: none"> – This study showed that Australian guidelines, meant to guide clinical practice for most common chronic diseases treated in general practice, failed to take properly into account the fact that people frequently have more than one disease. – When a person has more than one disease, it makes treatment by GPs more complicated. Despite this, guidelines provide limited advice to GPs on how to deal with the complications that arise from having several conditions. – The team recommend that NHMRC make addressing multimorbidity compulsory in guideline development and that guideline developers specifically and systematically deal with the full range of impacts multimorbidity has on patient care. |
| Prof Danielle Mazza | Monash University | Improving the implementation of obesity guidelines in Australia: Practice, practitioner and patient challenges and opportunities | Completed May 2017 | <ul style="list-style-type: none"> – NHMRC guidelines state that Body Mass Index and waist circumference are key measures for the assessment of overweight and obesity, however previous work demonstrated that these measures are poorly recorded in general practice. – This study aimed to identify practice by conducting a qualitative study of the views of GPs and practice staff. – Four key domains were identified: 1) Addressing weight issues was challenging for GPs and practice staff, particularly doing so opportunistically and where GPs had poor knowledge of services to refer to (Beliefs and Capabilities); 2) A professional sense of responsibility to patients was a strong motivator to carry out the recommendations as was personal weight issues in the health profession (Motivation and Goals); 3) Fear of losing patients or damaging existing doctor-patient relationships was another factor (Emotion); 4) Concern regarding out of pocket expense or adding to the patient's existing burden when they already had significant comorbidity (e.g. Mental health issues) (Environmental context and resources). |

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| Prof Danielle Mazza | Monash University | Improving the implementation of obesity guidelines in Australia: Practice, practitioner and patient challenges and opportunities | Completed May 2017 | <ul style="list-style-type: none"> – Utilisation of the Theoretical Domains Framework allowed the team to better understand barriers and enablers to obesity guideline implementation. Their findings will help inform the development of interventions aimed at improving the implementation of obesity guidelines in the general practice setting. – The funding of this research allowed the team to undertake one of the pieces of the jigsaw puzzle, which when put together with other work in this field, helped them to undertake further work to ensure that the national obesity guidelines are implemented in general practice. |
| Prof Mark Nelson | University of Tasmania | Getting Evidence to Address General Practitioner Concern regarding the Uptake of Absolute Risk Guidelines for the Prevention of Cardiovascular Disease | In progress | |

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| Dr Carissa Bonner | University of Sydney | Combining new guideline formats with patient communication tools to facilitate evidence-based risk assessment and management in cardiovascular disease prevention | Completed May 2018 | <ul style="list-style-type: none"> – This study developed and tested a new format for the Australian absolute risk guidelines for cardiovascular disease (CVD) prevention, aiming to improve usability for GPs and communication with patients. – The intervention was an interactive online version of the guidelines linked to GP training exercises (example cases + audit and feedback) and patient communication tools (risk calculator + decision aid), targeting key behavioural barriers to implementing the guidelines identified in our previous research. Qualitative user feedback over 3 phases of development confirmed GP and patient satisfaction with the final resources, resulting in a more useful risk calculator that can be accessed in clinical practice via the website https://auscvdrisk.com.au. – The project led to new collaborations with GP networks, PHNs and the Heart Foundation, resulting in two new planned projects for 2019: 1) integrating the new website with GP medical software, and 2) developing and testing a patient/consumer version of the website to cater to the needs of people with lower health literacy. |
| Prof Jane Gunn | The University of Melbourne | The STOP Study: Sensible Timely Options for reducing inappropriate antidepressant use in general practice | Completed May 2018 | <ul style="list-style-type: none"> – Alarming, more antidepressant (AD) prescriptions were written in Australia in 2017 than there were Australians. This is because many people keep taking ADs for longer than they need to and often don't know when or even how to stop. – Depression is a major public health concern that is most often identified and managed in primary care. Rates of antidepressant use are markedly increasing, as is global recognition that inappropriate long-term use is a significant contributor to that increase. |

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| Prof Jane Gunn | The University of Melbourne | The STOP Study: Sensible Timely Options for reducing inappropriate antidepressant use in general practice | Completed May 2018 | <ul style="list-style-type: none"> – Current AD use is unsustainable, clinically unnecessary, and potentially harmful. It is clear that this issue needs to be addressed and that patients and GPs require support to successfully navigate the discontinuation process. – The intervention in this study was designed to be immediately scalable into routine primary care practice and have minimal impact on GP workload. The potential for this research to inform Australian mental health policy and practice is high. – Through focus groups with patients and GPs, the team developed a four-step online program to help people stop taking antidepressants when their GP says it's OK to do so. – The team has links to peak professional bodies, advisory bodies at the state and federal government levels, and PHNs across Australia. – The findings of this research will be reported directly to decision-makers, and the team will work closely with them to translate their findings into system-level changes. |
| A/Prof Michelle Guppy | University of New England | Chronic Kidney Disease in General Practice- GPs attitudes and current practice with respect to the Australian 2015 Chronic Kidney Disease (CKD) Management in General Practice guideline | In progress | |

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| Dr Jo-Anne Manski- Nankervis | University of Melbourne | Understanding antibiotics prescrib- ing and all of the guidelines in general practice. The GP National An- timicrobial Prescrib- ing Survey (GP NAPS) pilot study | In progress | |

