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Workforce challenges and opportunities

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SHR workforce roundtable
Perth
July 2018

Context

Workforce planning and policy is an instrumental goal:

- *The right person provides the right care in the right setting, on time, every time.*
- *The right person **enables** the right care in the right setting, on time, every time.*
- ***The right member of the health care team** enables the right care in the right setting, on time, every time.*

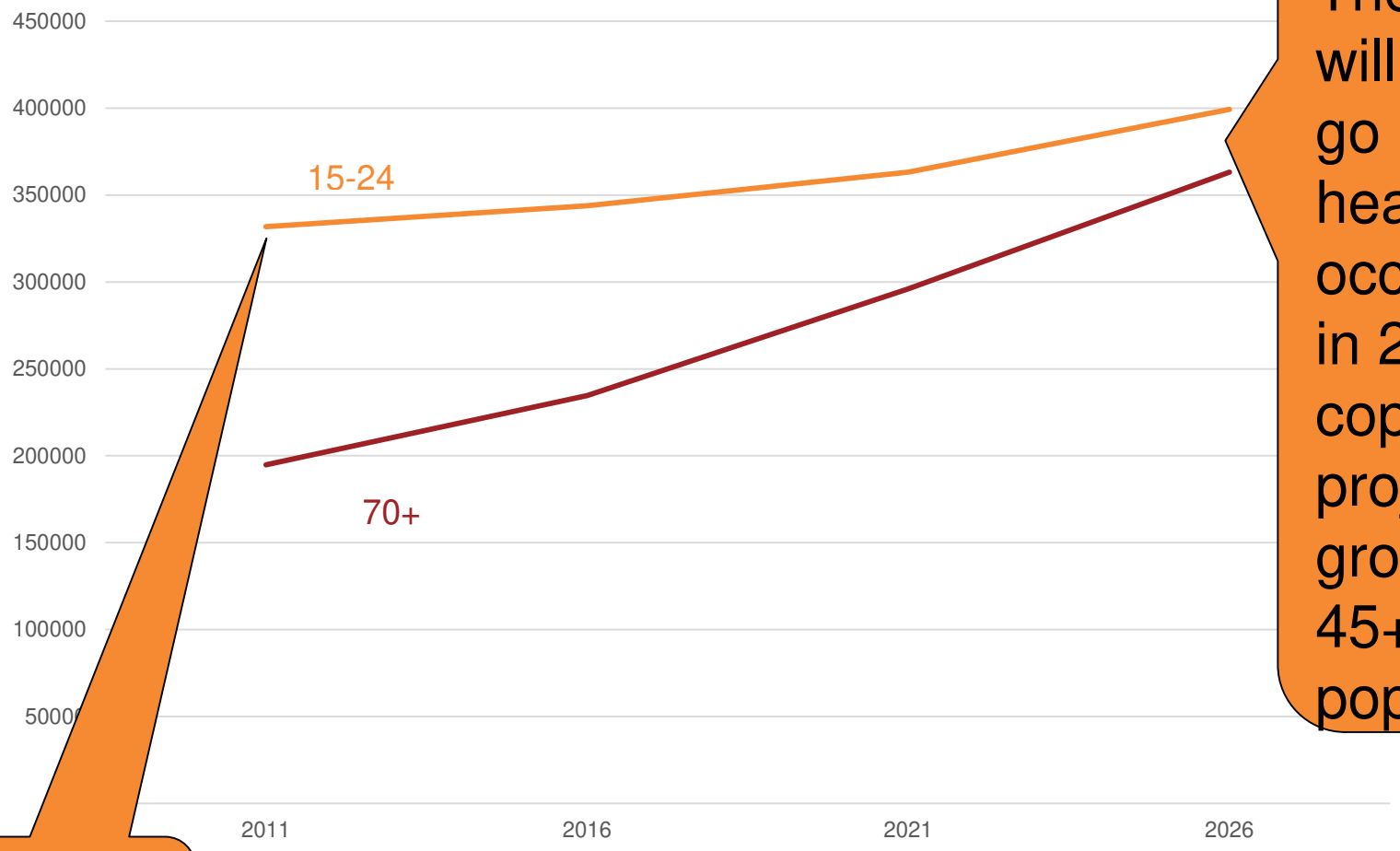
Agenda

- Context
- Options
- Implementation challenges

The health (and social care) workforce is projected to grow (2017-2022)

http://lmip.gov.au/default.aspx?LMIP/GainInsights/EmploymentProjections

The WA population is growing



Then 12% will need to go into health occupations in 2026 to cope with projected growth in 45+ population

Assume 10% of school leaver population needs to go into health occupations in 2011

Policy options

Demand side

- Automation/robotics
- Digitisation
- Genomics
- Self management

Supply side (workforce focus)

- Change retention rates
- Change roles

Squandering Skills in Primary Care

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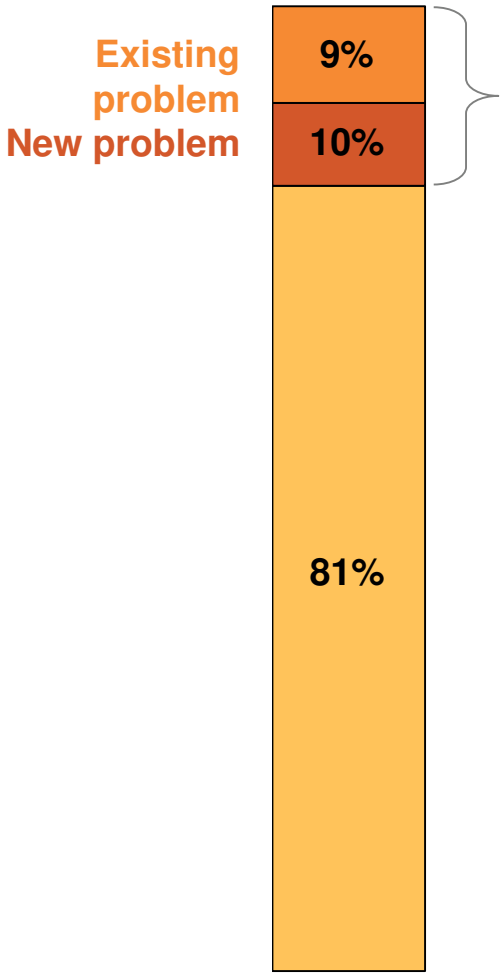
Proportion of GP visits by complexity (%)

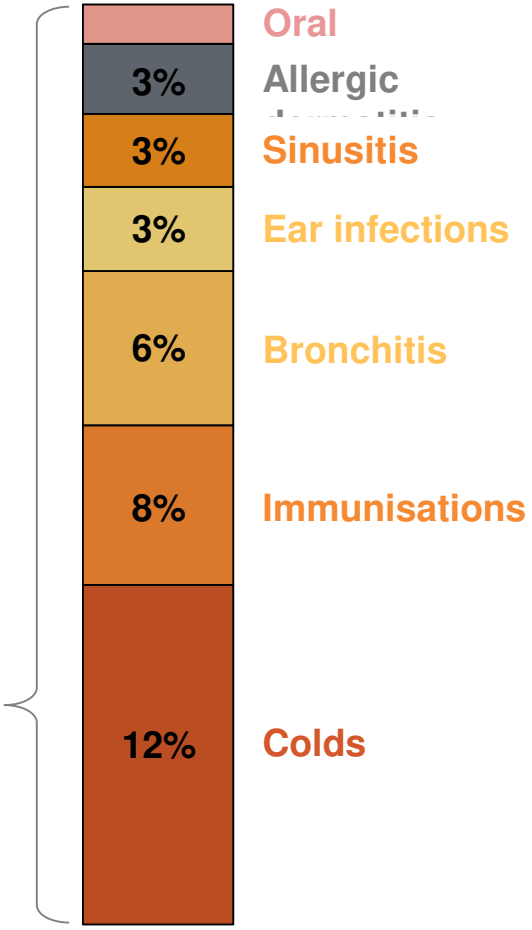


'Less complex' GP visits

- Only one problem managed
- 1-2 medications prescribed
- No pathology or imaging
- No procedures (excluding immunisations)
- No other clinical treatments (excluding advice/education)

Approximately 1/3 of 'less complex' visits or 12 million visits a year

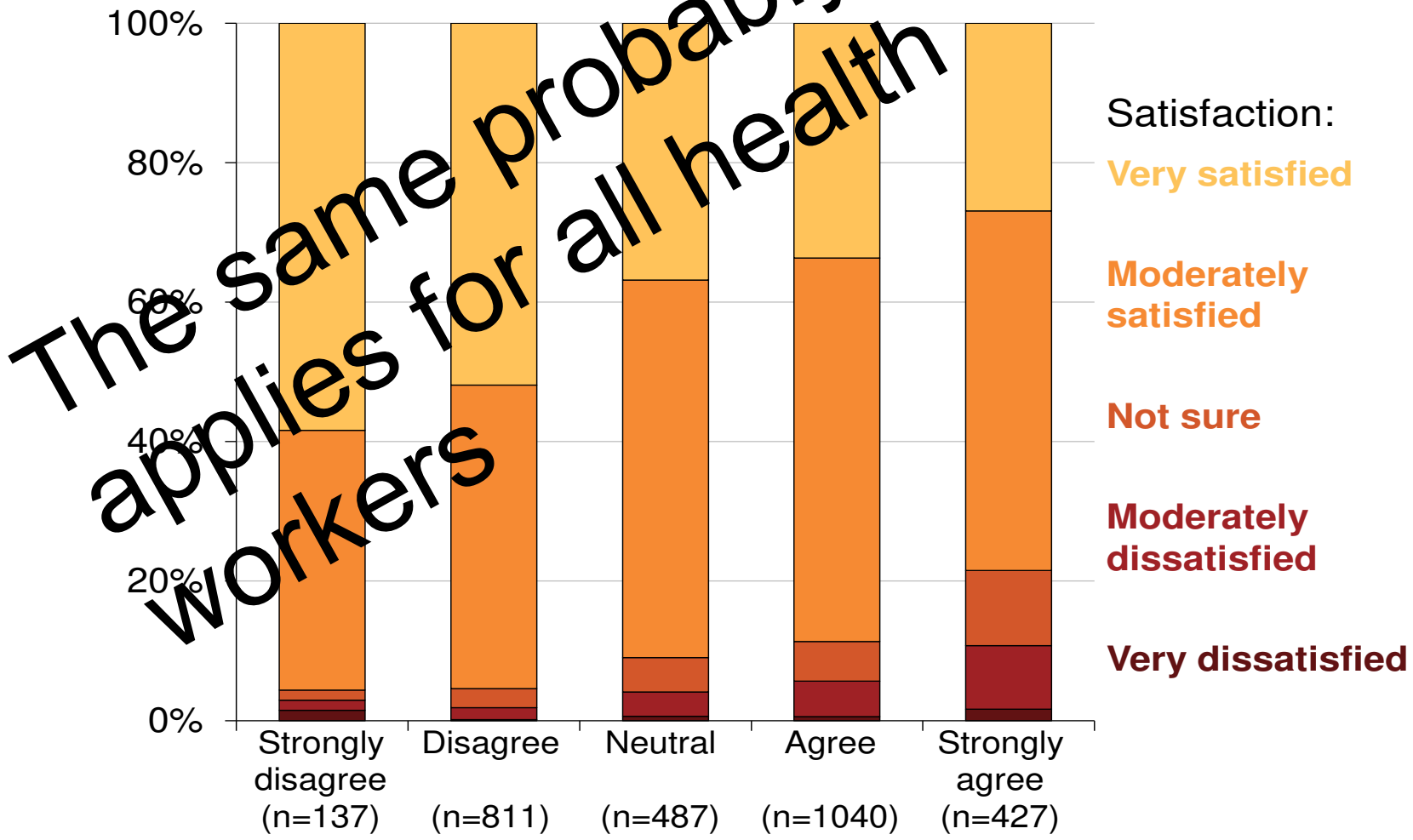
Proportion of 'less complex' visits with relatively straightforward problems managed



Source: Grattan Institute analysis of BEACH data

Job satisfaction improved with more complex roles

Hospital specialists' overall job satisfaction by responses to the statement "I often undertake tasks that could be done by somebody less qualified than me"



The same probably applies for all health workers

Respondents saw significant scope for change

For each of the following groups respondents were asked to estimate the percentage of workload that could be done by a lower-cost group, without reducing quality of care

In round 2, respondents were provided with the average results from the previous round, which may have contributed to rising and converging estimates

For each workforce group at least 94% of respondents suggested that some substitution was possible

There was very strong agreement with a wide range of substitution options

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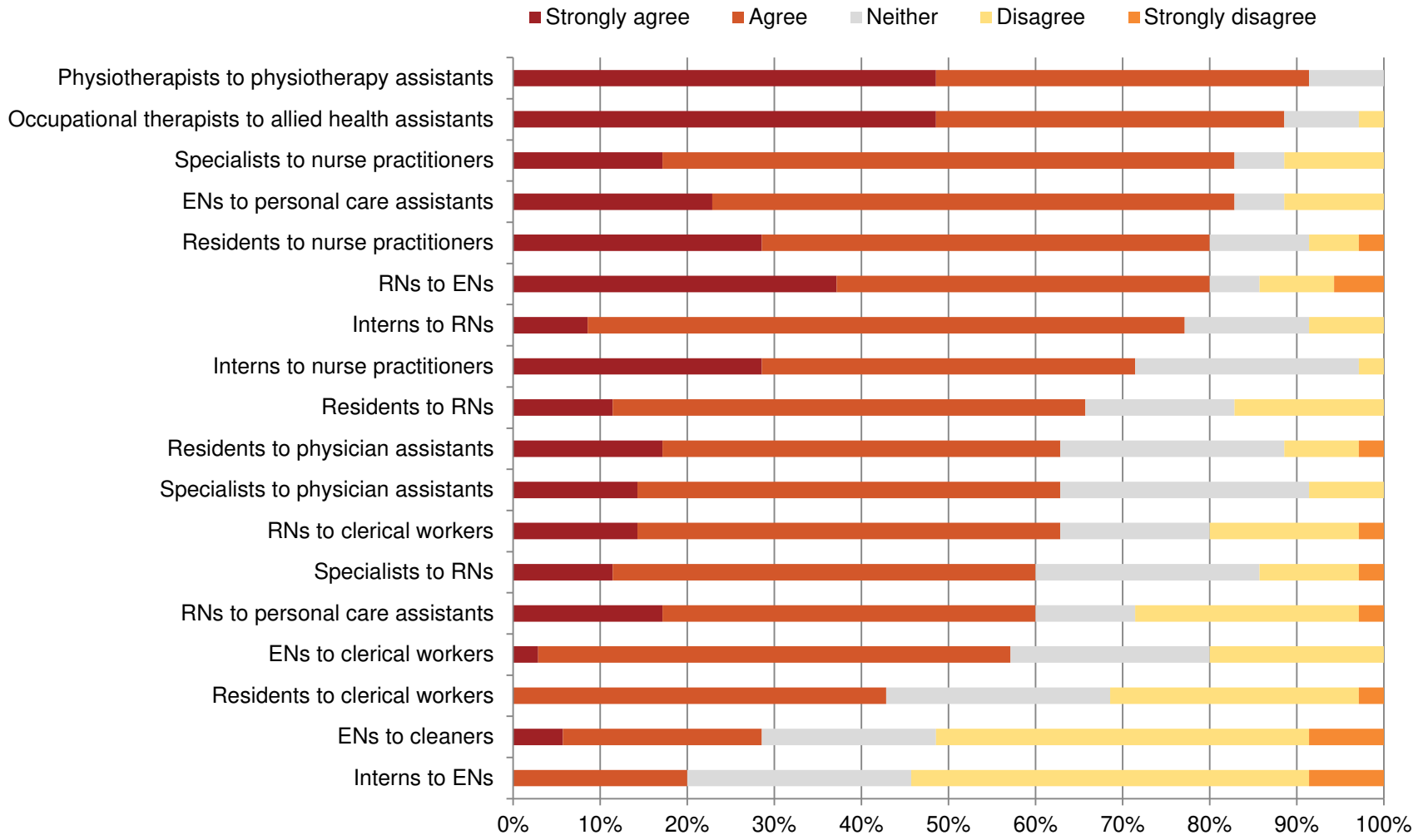
Respondents were asked to what extent they agreed that the following shifts of workload would reduce the cost without reducing quality and safety



What can be done about role change?

We found no significant difference between nurse-led care for patients with asthma compared to physician-led care for the outcomes assessed. Based on the relatively small number of studies in this review, nurse-led care may be appropriate in patients with well-controlled asthma. More studies in varied settings and among people with varying levels of asthma control are needed with data on adverse events and health-care costs.

What can be done about role change?

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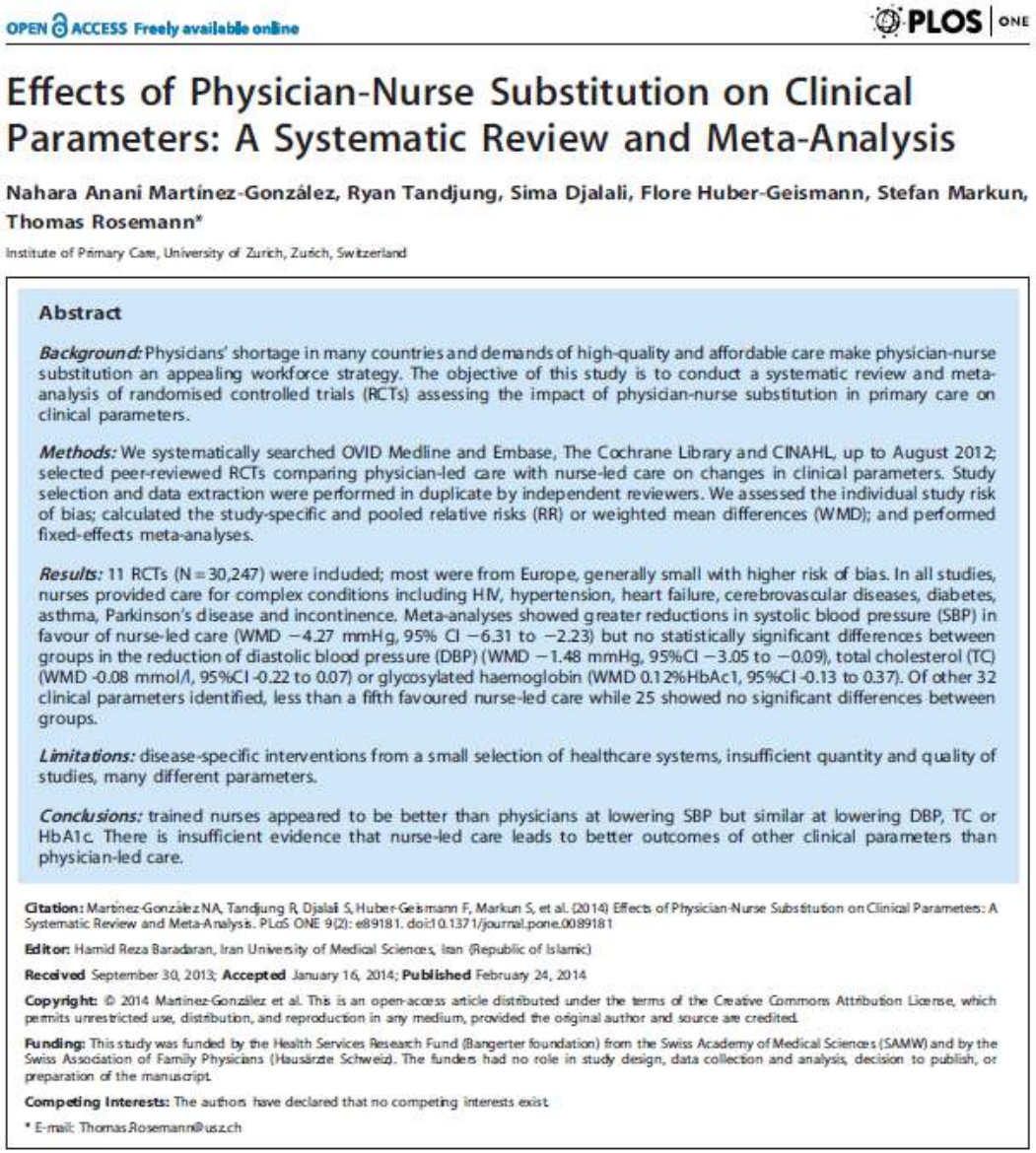

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PLOS ONE

Effects of Physician-Nurse Substitution on Clinical Parameters: A Systematic Review and Meta-Analysis

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Abstract

Background: Physicians' shortage in many countries and demands of high-quality and affordable care make physician-nurse substitution an appealing workforce strategy. The objective of this study is to conduct a systematic review and meta-analysis of randomised controlled trials (RCTs) assessing the impact of physician-nurse substitution in primary care on clinical parameters.

Methods: We systematically searched OVID Medline and Embase, The Cochrane Library and CINAHL, up to August 2012; selected peer-reviewed RCTs comparing physician-led care with nurse-led care on changes in clinical parameters. Study selection and data extraction were performed in duplicate by independent reviewers. We assessed the individual study risk of bias; calculated the study-specific and pooled relative risks (RR) or weighted mean differences (WMD); and performed fixed-effects meta-analyses.

Results: 11 RCTs (N = 30,247) were included; most were from Europe, generally small with higher risk of bias. In all studies, nurses provided care for complex conditions including HIV, hypertension, heart failure, cerebrovascular diseases, diabetes, asthma, Parkinson's disease and incontinence. Meta-analyses showed greater reductions in systolic blood pressure (SBP) in favour of nurse-led care (WMD −4.27 mmHg, 95% CI −6.31 to −2.23) but no statistically significant differences between groups in the reduction of diastolic blood pressure (DBP) (WMD −1.48 mmHg, 95%CI −3.05 to −0.09), total cholesterol (TC) (WMD -0.08 mmol/l, 95%CI -0.22 to 0.07) or glycosylated haemoglobin (WMD 0.12%HbAc1, 95%CI -0.13 to 0.37). Of other 32 clinical parameters identified, less than a fifth favoured nurse-led care while 25 showed no significant differences between groups.

Limitations: disease-specific interventions from a small selection of healthcare systems, insufficient quantity and quality of studies, many different parameters.

Conclusions: trained nurses appeared to be better than physicians at lowering SBP but similar at lowering DBP, TC or HbA1c. There is insufficient evidence that nurse-led care leads to better outcomes of other clinical parameters than physician-led care.

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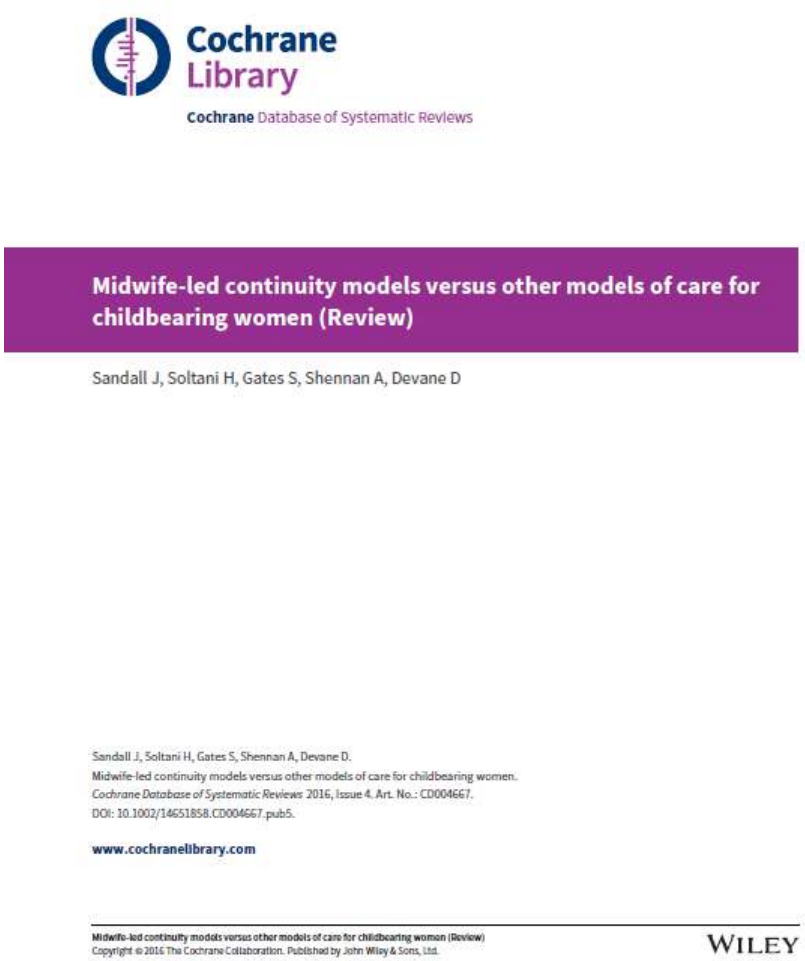
Trained nurses appeared to be better than physicians at lowering SBP but similar at lowering DBP, TC or HbA1c. There is insufficient evidence that nurse-led care leads to better outcomes of other clinical parameters than physician-led care.

What can be done about role change?

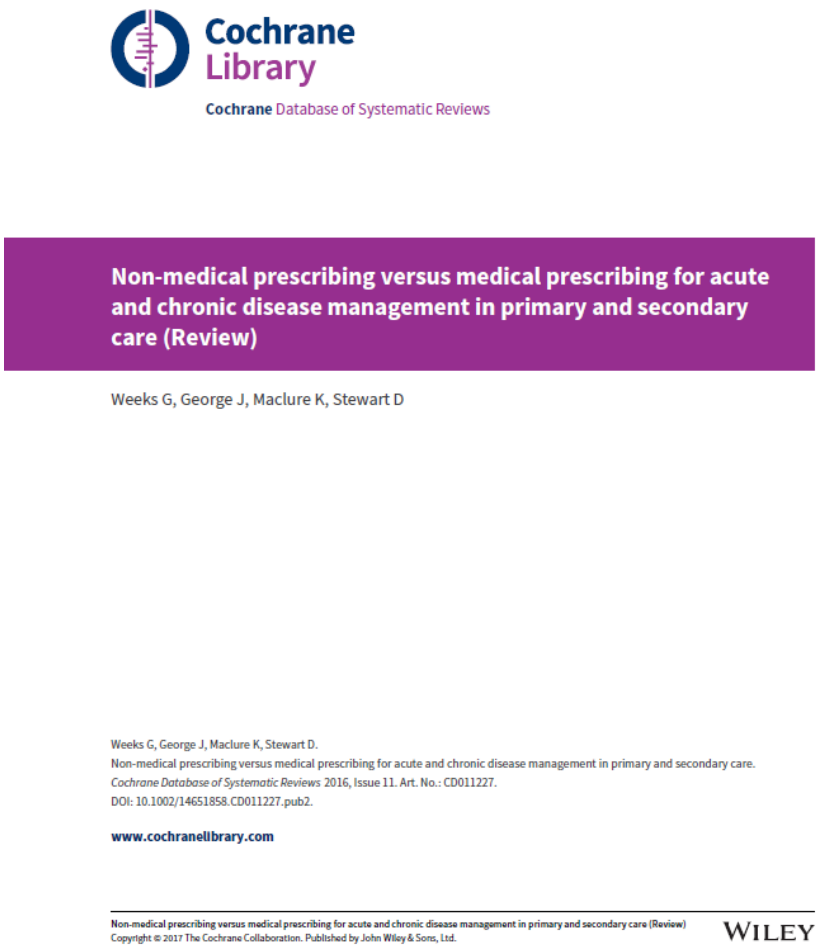
Pharmacist-provided services that target patients may improve clinical outcomes such as management of high glucose levels among diabetic patients, management of blood pressure and cholesterol levels and may improve the quality of life of patients with chronic conditions such as diabetes, hypertension and asthma. Pharmacist services may reduce health service utilisation such as visits to general practitioners and hospitalisation rates. …Similarly, conclusions could not be drawn for health service utilisation and costs due to lack of evidence on interventions delivered by pharmacists to healthcare professionals.

What can be done about role change?



This review suggests that women who received midwife-led continuity models of care were less likely to experience intervention and more likely to be satisfied with their care with at least comparable adverse outcomes for women or their infants than women who received other models of care.

What can be done about role change?



The findings suggest that non-medical prescribers, practising with varying but high levels of prescribing autonomy, in a range of settings, were as effective as usual care medical prescribers. Non-medical prescribers can deliver comparable outcomes for systolic blood pressure, glycated haemoglobin, low-density lipoprotein, medication adherence, patient satisfaction, and health-related quality of life. It was difficult to determine the impact of non-medical prescribing compared to medical prescribing for adverse events and resource use outcomes due to the inconsistency and variability in reporting across studies.

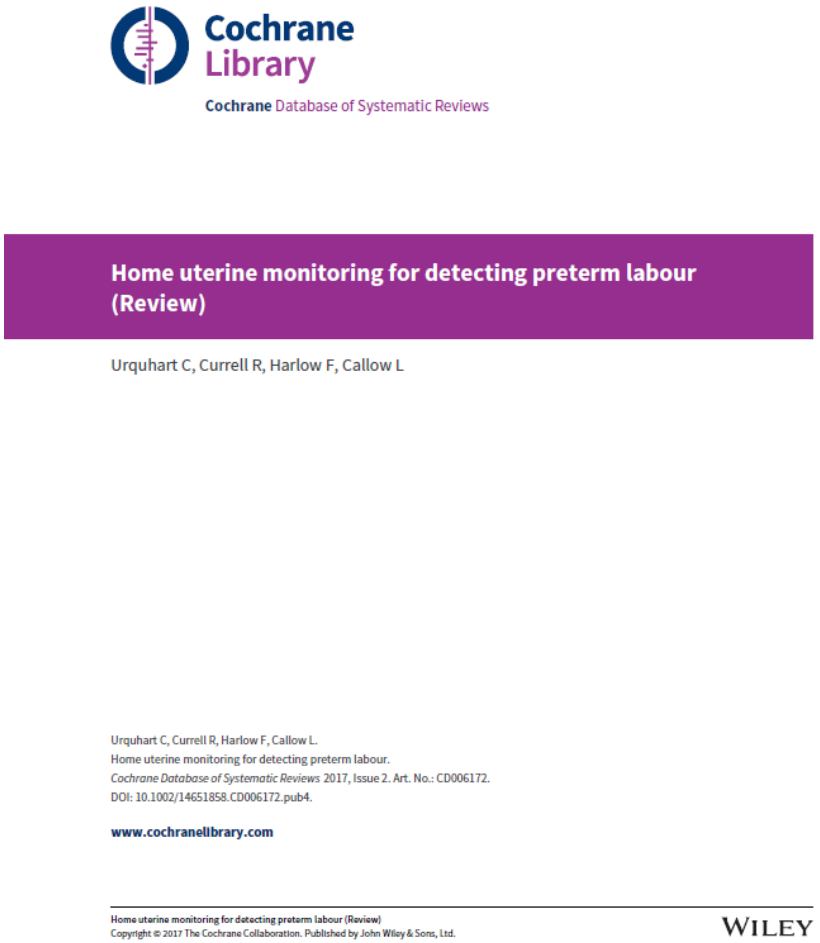
What can be done about role change?

Participants who self-monitor or self-manage can improve the quality of their oral anticoagulation therapy. Thromboembolic events were reduced, for both those self-monitoring or self-managing oral anticoagulation therapy. A reduction in all-cause mortality was observed in trials of self-management but not in self-monitoring, with no effects on major haemorrhage.

What can be done about role change?

Self-help may be useful for people who are not able or are not willing to use other services for people with anxiety disorders; for people who can access it, face-to-face cognitive behavioural therapy is probably clinically superior.

What can be done about role change?



Home uterine monitoring may result in fewer admissions to a neonatal intensive care unit but in more unscheduled antenatal visits and tocolytic treatment; the level of evidence is generally low to moderate. …There is no impact on maternal and perinatal outcomes such as
perinatal mortality or incidence of preterm birth.

Perceived barriers to change

* Professional culture
* Tradition
* Registration restrictions
* Industrial relations

Workforce reform

Health expenditure can be described in a number of ways

- What money is spent on
- Who money is spent through

Quantities of health care (hospital admissions, doctor visits, prescriptions)	X	Price of each service
Number of service providers (including suppliers)	X	Average income, revenue or profit of each provider

Use financial incentives for change

COMMENTARY

The Science of Large-Scale Change in Global Health

C. Joseph McCannon, BA
Donald M. Berwick, MD, MPP
M. Rashad Massoud, MD, MPH

INNOVATION IN HEALTH CARE INCLUDES IMPORTANT CHALlenges: to find or create technologies and practices that are better able than the prevailing ones to reduce morbidity and mortality and to make those improvements ubiquitous quickly. In many respects in the pursuit of global health, the second challenge—the rapid spread of effective changes—seems to be the greater. Many sound (even powerful) solutions exist, such as new medicines and innovations in health care delivery, but their adoption is unreliable and slow. Often, they remain hidden in pockets around the globe, flourishing locally without reliably reaching those in need elsewhere. Some such solutions come from biomedical research, but even more take shape at the point of care, in settings where local problem solvers create effective new approaches to problems that others who live far away face as well.

Failure to deploy improved technologies and practices widely and quickly is a form of waste that donors, researchers, clinicians, and, most of all, communities in developing nations cannot afford. It behooves those who sponsor biomedical science to make commensurate investments in operational sciences that can inform and energize the active dissemination of new solutions. This is a crucial, but as yet largely neglected, global project: to rapidly spread effective prototypes to entire populations. Scaling up should become a major and sustained enterprise in the global health community. It has its own scientific foundations.

Current Prevailing Paradigm

At present, innovators in global health, especially scientists, often operate with an implicit theory of spread: the theory that good ideas demonstrated in successful prototype projects will reach audiences through publication, market forces, or communication networks. Putting their faith in journals, Web sites, and conferences, innovators dutifully generate guidelines, normative reports, descriptive recommendations, and clinical training programs, hoping that front-line practitioners and health care organizations will find successful innovations, adapt them, and adopt them.

That theory is weak; good ideas, even when their value is thoroughly demonstrated in one place, will not reliably spread into action through normal communication channels at a pace truly responsive to the enormous health care challenges in resource-poor settings. A significant barrier is overload: the sheer volume of new studies, interventions, and reports overwhelms all but the most conscientious clinicians. Even when health care system leaders or clinicians become aware of a promising innovation, their ability to introduce it is often severely constrained by limitations of time, resources, and skill. Those in potentially adopting sites face the difficult work of transitioning from learning about a concept to meaningful action in their own local setting, which requires leadership, sociological sophistication, and attentive management. Most innovative technologies (such as sound antiretroviral therapies) and most innovative clinical processes (such as new roles for community health workers) must be actively, not passively, spread, or they may not spread at all.[1]

Successful, informative examples of introducing change on a large scale do exist in global health.[2] For example, some major public health projects have changed the profile of disease in entire populations (eg, smallpox eradication, the control of polio, and the work of the Bangladesh Rural Advancement Committee to reduce morbidity from diarrhea[3]); some innovations in roles for the workforce, such as nurse-based scale-up of antiretroviral therapies in Zambia, have moved from experiments to prevalent norms[4]; some countries have broadly introduced and adapted enhanced-care guidelines (eg, Niger and Ecuador have observed significant reductions in birth complications in programs sponsored by the US Agency for International Development's Quality Assurance Project[5,6]); and some of our own programs, supported by the Centre for Rural Health (University of KwaZulu-Natal, Durban), the Reproductive Health Research Unit (University of the Witwatersrand, Johannesburg), and the Institute for Healthcare Improvement, have successfully expanded antiretroviral treatment in several provinces in South Africa.[7]

The best of these initiatives, even when targeting a specific disease, have operated within existing public health care structures, building system-wide skill at rapidly adopting better practice that can be applied to the management of other acute and chronic diseases. Each of these projects sought not only to spread the news of best practice or to demon-

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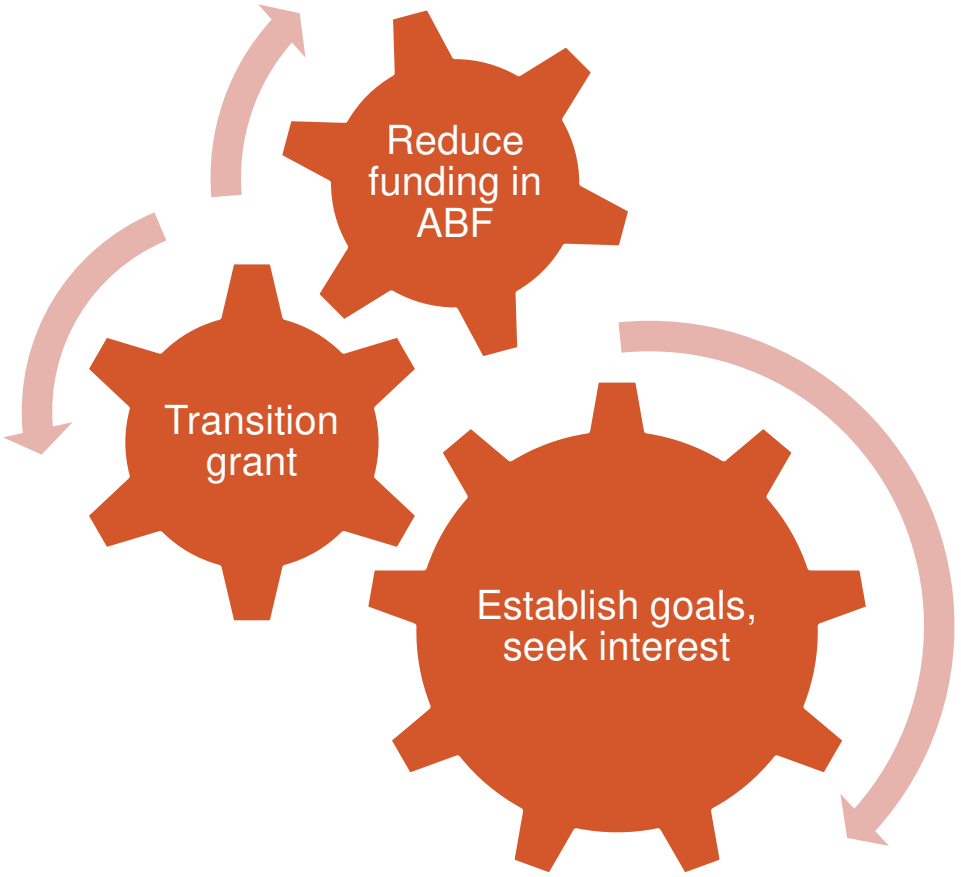
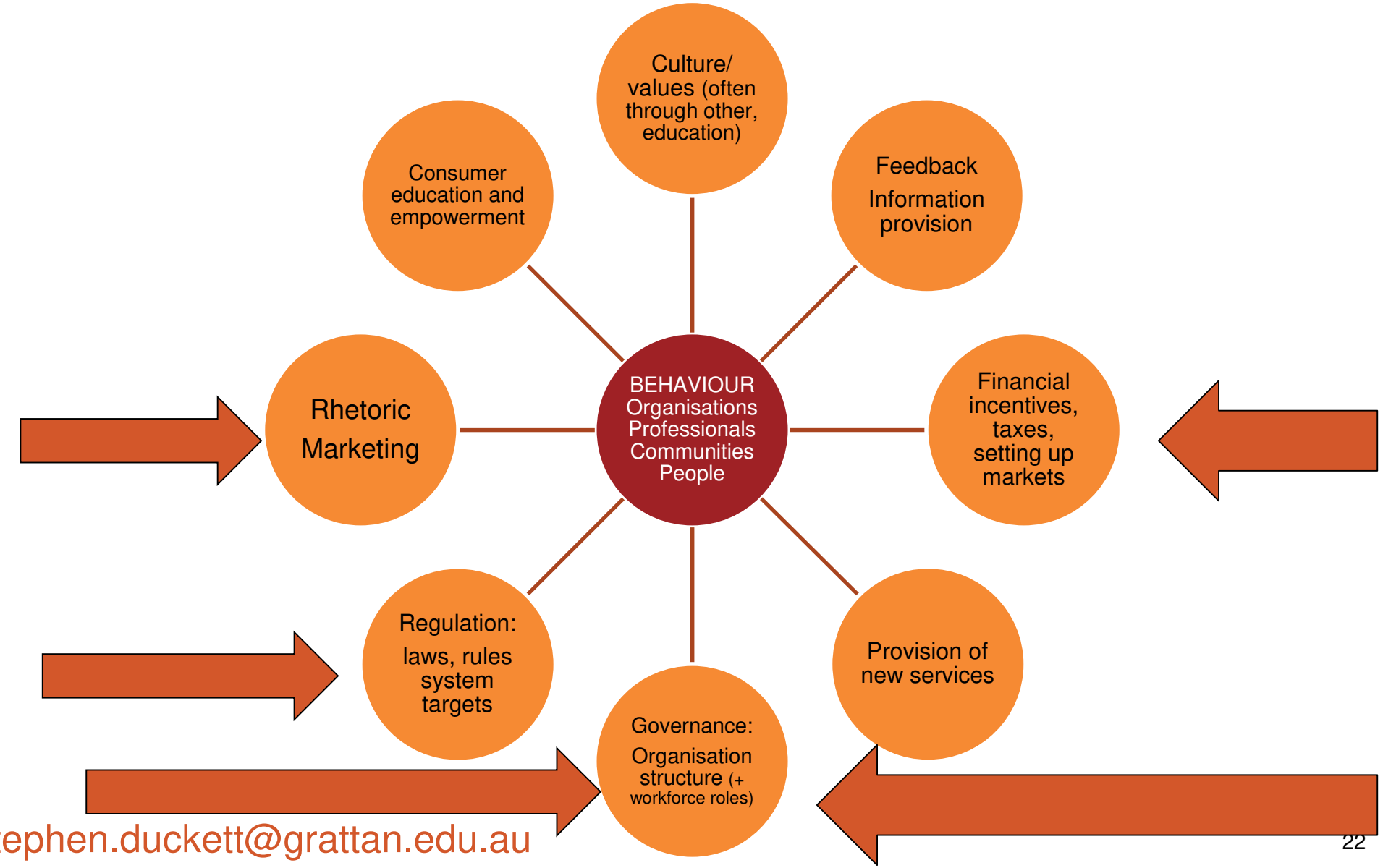


Need to make sure all policies/ incentives are aligned



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