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OF TROPICAL HEALTH & MEDICINE



JAMES COOK
UNIVERSITY
AUSTRALIA

Cairns
Singapore
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Panel 2e – Collaborative partnerships in health security surveillance and response

Tuesday 19th February 2019



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SYDNEY



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MEDICAL RESEARCH**



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Vision

A strong regional health system in terms of capacity for surveillance and response

That can provide timely, effective responses to emerging and existing infectious disease threats in the Asia Pacific Region



Objectives

Research

Training and capacity strengthening

- Increase capacity to develop local solutions for local problems

- Assist in developing capacity to predict and manage potential risks

Tools development

- Data gathering

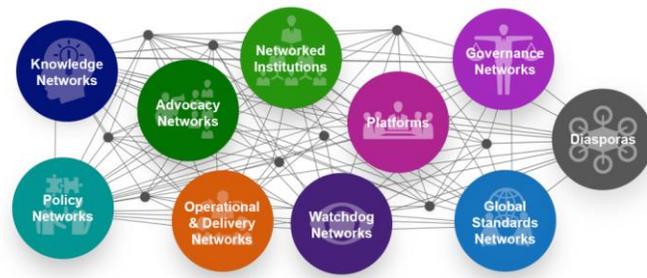
- Data analysis

- Decision support

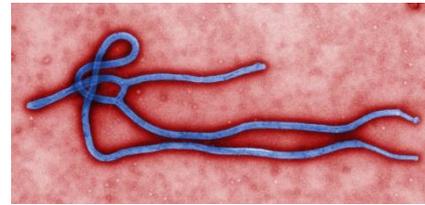
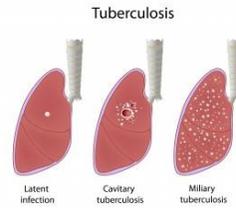
Data availability –legacy databases



Theme 2 Systems and communication



Theme 3 Collaborative Scientific projects



Theme 1 Capacity building







3b Tanya Russel



3a Adeshina Adekunle



2a Anna Palagyi



3c Kinley Wangdi



3 Joel Kelso



1, 3b
Humpress Harrington



3d Paul Horwood, Vanina Guernier



2b Bosco Ho



1 Karen Carlisle









[Prof Maxine Whittaker](#)



Strengthening capacity for implementation research to support strengthening of local capacity for surveillance and response



2019 Australasian Aid Conference

ANU, Canberra 19th February 2019

Sarah Larkins, **Maxine Whittaker**, David MacLaren, Karen Carlisle, Humpress Harrington

Introduction

“An integrated global alert and response system for epidemics and other public health emergencies based on **strong national public health systems and capacity** and an effective international system for coordinated response”.
(<https://www.who.int/csr/en/>)

Stronger health security within health systems relies upon several underpinning components such as the quality and safety aspects of service delivery; infection prevention and control; community engagement; health workforce; health information systems; supply chain management; and adapted infrastructure.



Prevent

Working together to prevent the likelihood of outbreaks and other public health hazard events through, for example, vaccination programmes.

Detect

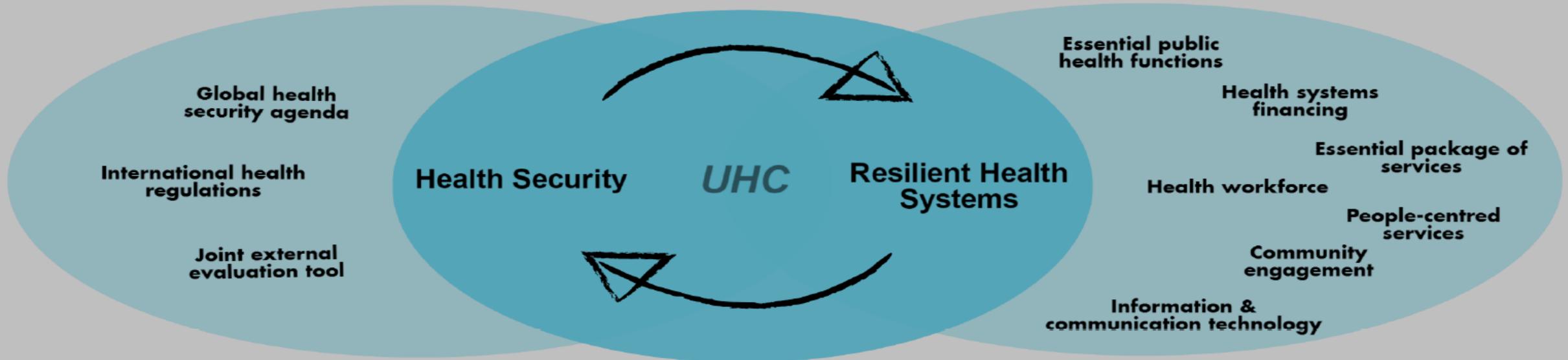
Early detection of public health emergencies depends on resilient health systems with functioning and trusted health facilities, laboratories, surveillance systems, etc.

Respond

Effective response requires activities & infrastructures such as functioning health facilities, public health EOCs & case management to mitigate the impact of the emergency.

<https://www.who.int/ebola/health-systems-recovery/en/>

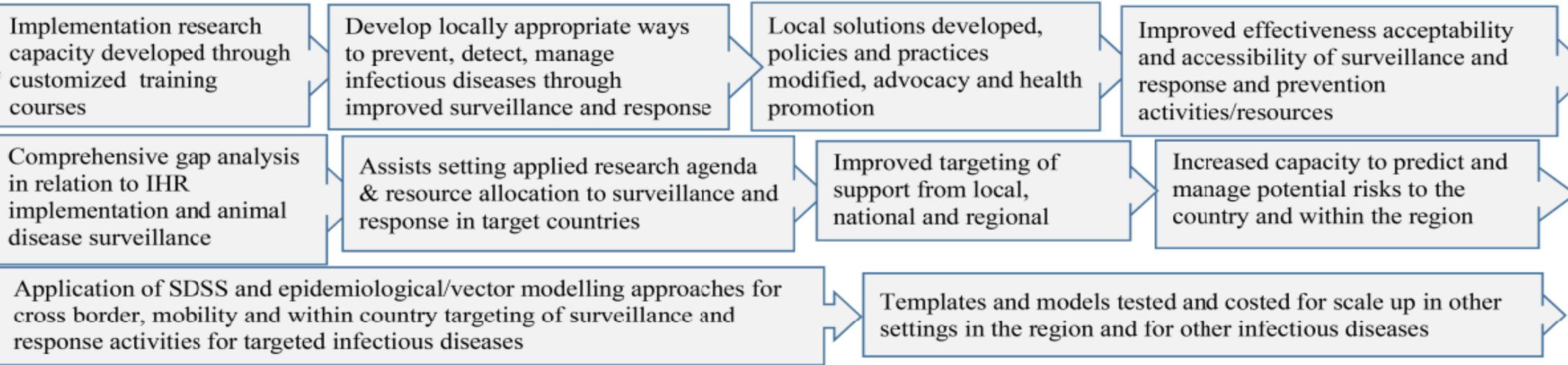
Strengthening health security and health systems



**Strong comprehensive health systems are essential for health security;
Health security strengthens health systems;
Quality universal health coverage is fundamental to global health security.**

Vision: Stronger health system surveillance and response capacity to support timely, effective responses to emerging and existing infectious disease threats within Asia Pacific Region developed

Develop stronger diagnostic, management and leadership capacity within 3 Pacific countries
Identify priority evidence, policy, implementation gaps and generate “risk maps” at a Western Pacific Region level
Provide targeted priority training to the clinical and public health workforce in surveillance and response, implementation research, clinical skills leadership training
Develop implementation research capacity and use of data in surveillance and response at local levels to support development of context specific SR approaches
Identify priority evidence, policy, implementation gaps and generate “risk maps” at a Western Pacific Region level



**Reduction in preventable deaths due to emerging and re-emerging infectious diseases
Prevention of cross border spread of infectious diseases and improved regional health security**

Improved quality of life and human and economic development the region

Increased regional capacity to detect, track and respond to existing and emerging ID threats through changes in policy
Decreased ID morbidity and mortality in the region
Reduced threat to Australia and the region of existing or emerging infectious diseases

Capacity building: Training of regional health workers in surveillance and response to local infectious diseases issues



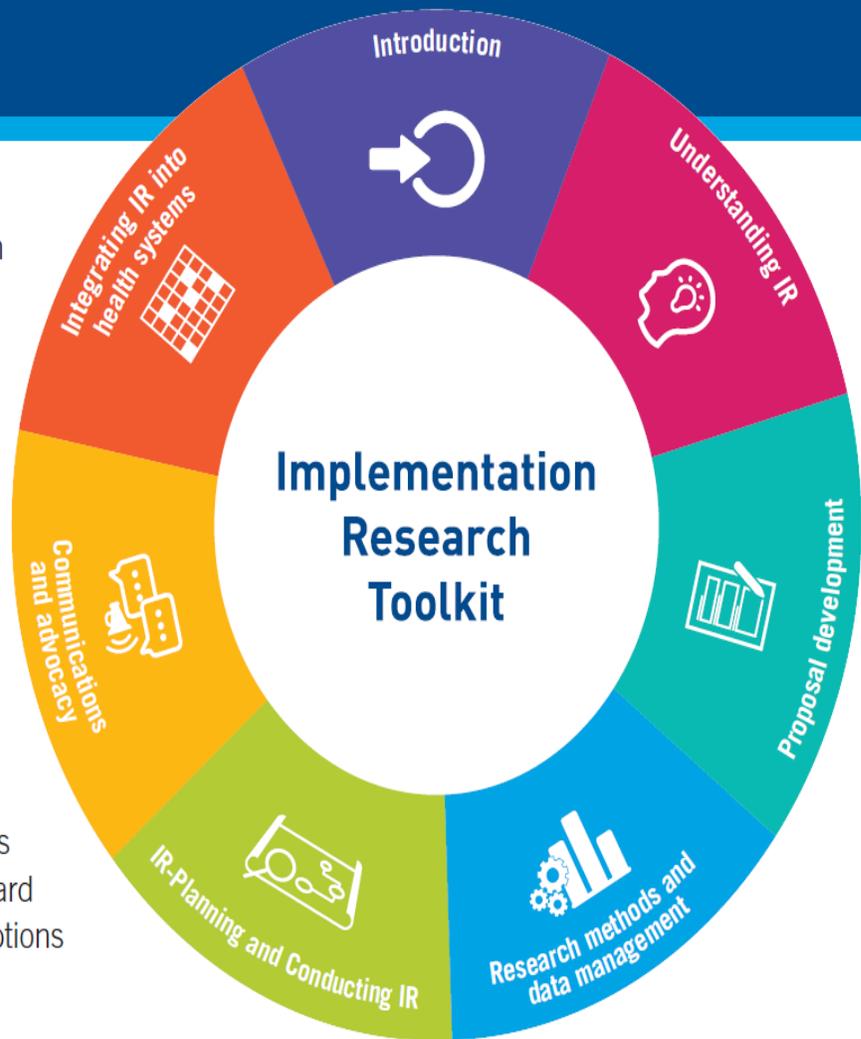
OUTCOMES

- workforce development
- increased implementation research (IR) capacity around surveillance and response
- mutual learning and partnership strengthening
- network development across borders
- evidence for policy and practice from projects using adapted SORT-IT tools

DELIVERABLES

- 50 regional health professionals complete IR training
- 5 peer reviewed open access journal articles
- 10 policy briefs or practice guidelines on surveillance and response to local infectious diseases with outbreak potential
- Scale up activities in country





Modified SORT-IT Training Program

Workshop 1 (10 days)

Infectious diseases, surveillance and response refresher
Contextualising implementation research
Developing an implementation research proposal

Milestone 1: Completion of Draft research proposal and ethics application submitted to local ethics committee (if required)

Workshop 2: (4 days)

Planning and conducting an implementation research project, ethics submission
Planning data analysis and presentations

Milestone 2: Completion of data collection and analysis plan

Undertake small work based implementation research project with support from local and international mentor

Milestone 3: Evidence of data collection

Workshop 3 (5 days)

Data analysis
Writing and publishing
Disseminating the findings (Dissemination Event)

Milestone 4: Policy brief &/ or draft manuscript

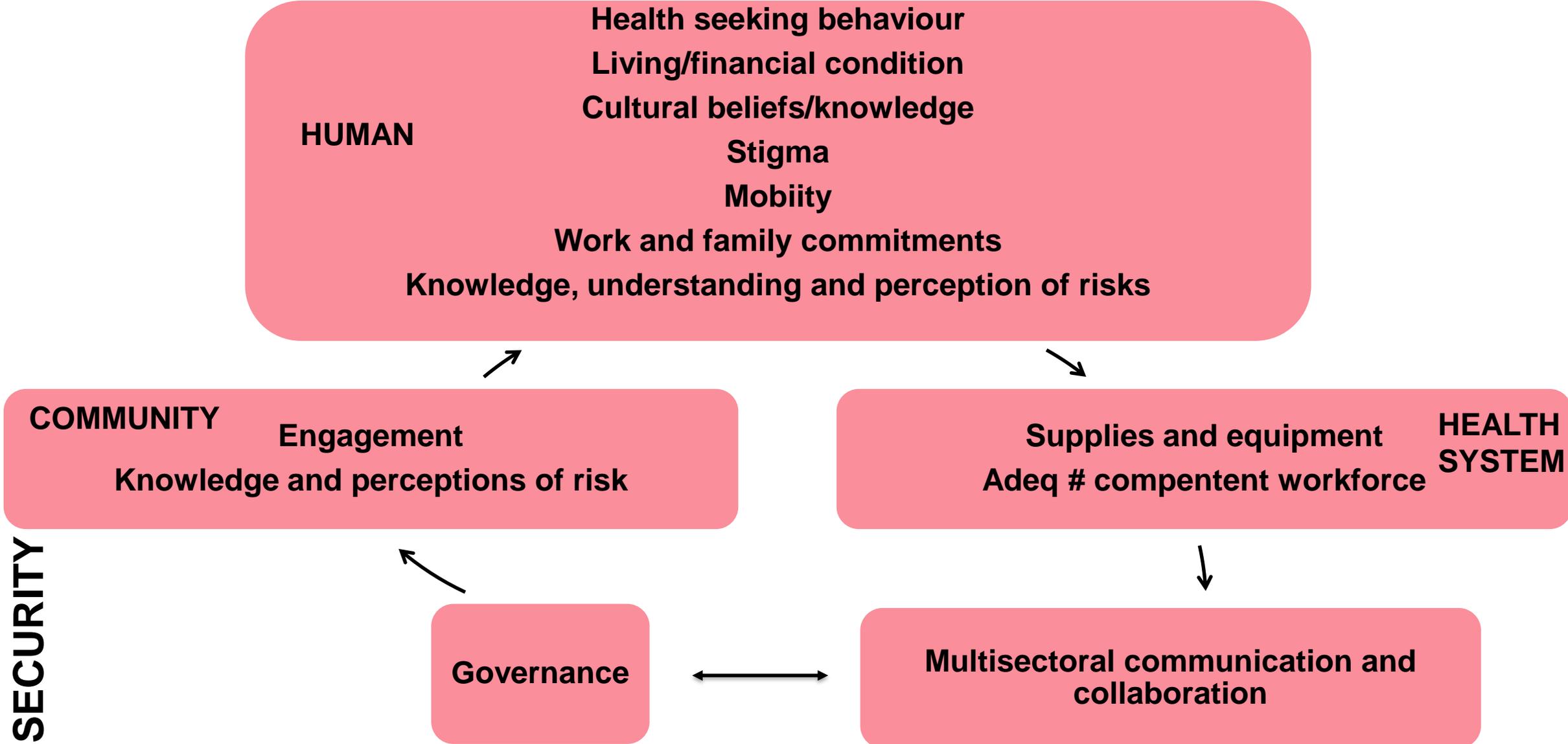
Infections :Dengue, AMR, Malaria, TB, WASH related infections, Zika, Chikangunya, Measles, Rubella, Fever/Rash

- Governance
 - Intersectoral collaborating (One health); IHR assessment
- Financing
 - Development assistance
- Health workforce
 - Clinical practices; Quality of Training (including new approaches evaluated); Surge capacity; Knowledge and motivation; Health workforce numbers
- Service delivery
 - Home based care, Community volunteers for dengue control, Immunization, DOTS. Net distribution
- Health information system
 - Use of data for prediction, response, evaluation; Quality of data and adherence to protocols; Linked data (climate, geography, diseases)
- Medical Products and infrastructure
 - Antimicrobial resistance; Water, sanitation and waste disposal facilities/supplies at Health facilities
- Community
 - Health seeking behaviour, causes for delay, Lived experiences, Knowledge and behaviours re: prevention (animal and human health)



| Building Blocks | What affects Surveillance Response Capacity |
|-------------------------------------|--|
| Governance | <ul style="list-style-type: none"> • Missing defined roles responsibilities, protocols, policies; • Poor communications and intersectoral collaboration |
| Financing | <ul style="list-style-type: none"> • Important role of development assistance financing • Withdrawal/decline in financing -> outbreak potentials |
| Workforce | <ul style="list-style-type: none"> • Inadequate knowledge and supervision (motivation & adherence issues) • Poor quality training and inadequate staff numbers/exhaustion |
| Health information system | <ul style="list-style-type: none"> • Under-reporting and double counting • Not using data for response/decision making/preparedness |
| Medical products and infrastructure | <ul style="list-style-type: none"> • Laboratory and health facilities ill–equipped/ supplied • Lack of water and sanitation facilities at health facilities • Poor antibiotic stewardship • Limited surge capacity |
| Service delivery | <ul style="list-style-type: none"> • Accessibility, affordability and acceptability issues • Inadequate health promotion and underperforming community volunteers |

INTERCONNECTIONS FOR HEALTH SECURITY





Where the trainings done?

- Fiji was held in FNU building, Bali training in Hotel and Solomon Islands - two out of three workshops at the Rural Atoifi Hospital,
- At the end of each workshop, each fellow gave 5 minutes PowerPoint presentation on the progress of their projects.
- The fourth milestone to be achieved – drafting of two page policy brief for policy makers and manuscript for publication.



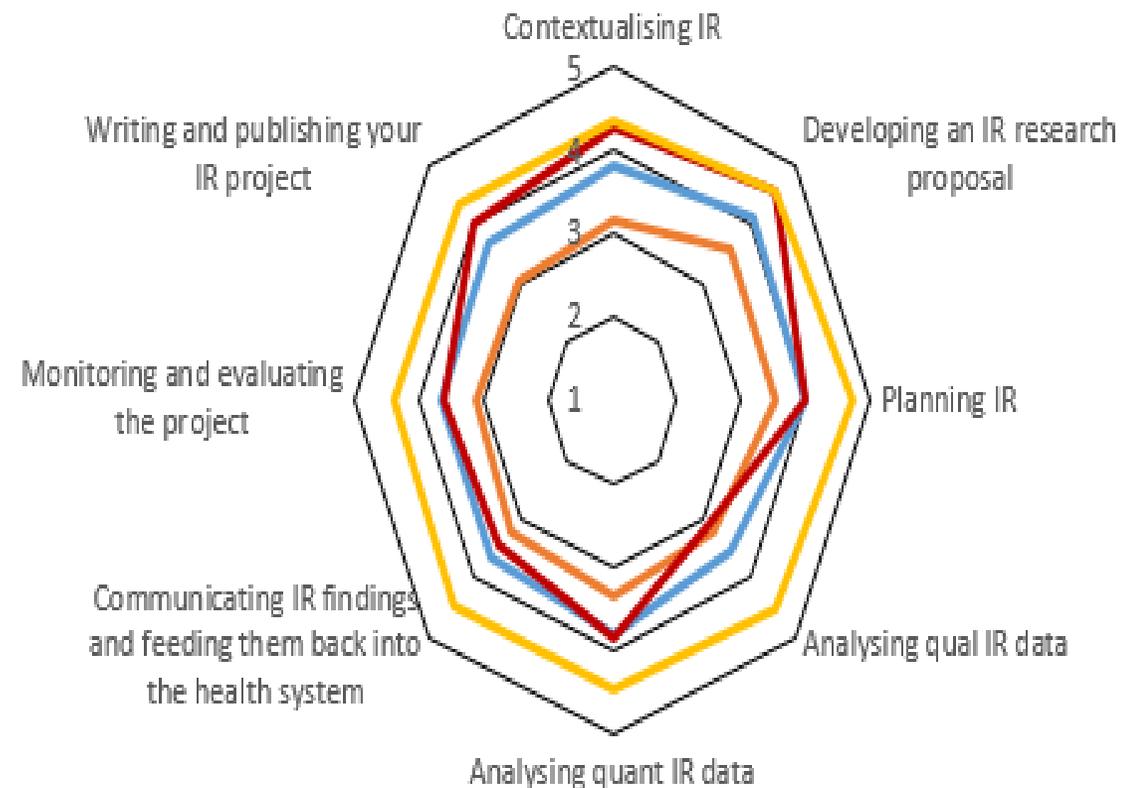
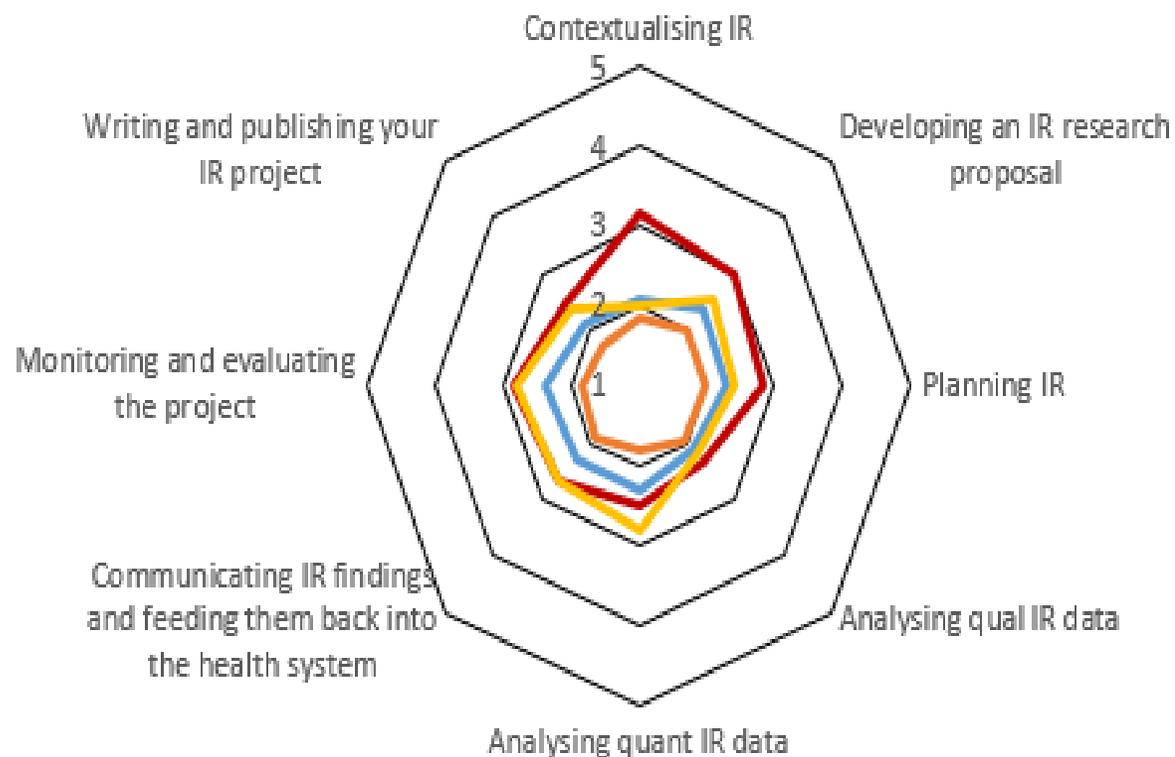
Evaluation

- Self reported research skills (pre and post workshops) via research spider
- Evaluation of workshops at the end of each workshop via paper survey with open and closed statements
- Interviews and focus groups with fellows at the end of the workshop series



Pre workshop 1

Post workshop 3



Assessing self reported research skills based on mean scores pre- and post-workshop for all Fellows (Note – IR: implementation research; qual: qualitative; quant: quantitative)

Key

- 1. Some awareness
- 2. Understanding
- 3. Knowledge
- 4. Skills
- 5. Competence



Workshop Evaluations

Most valuable aspect

“Everybody participating and interest in sharing experiences”

“Managing to come up with a research topic within the second day of the workshop and nearly completed a proposal within 10 days”

“The ability to discuss projects and determine whether...on the right track”

“Contextualising the teaching tools to local context; experiences shared on similar studies from neighbouring countries; sharing of data”



Workshop Evaluations

Room for improvement

“This workshop could be improved if other local mentors learn research in theory and also by doing. This would give them more knowledge that can equip them in order to support the fellows”

“If local mentors could also attend workshops to be able to guide fellows to focus their research topics”

“Venue needs to have good internet access and constant power supply. A good quiet environment...is perfect for such training”

“More time for workshop 2 [analysis]”



Interviews and focus groups

Fellow/Participant's perspective:

- The term “Research” as a giant
- “Small is Beautiful” – small, simple, and quality relevant health research
- Communication challenge (Academic writing)
- Research on issues of country’s priority



Interviews and focus groups

Mentor's perspective:

- In-country mentors - less confident at the beginning
- Communication with the fellows has been a challenge
- In-country mentors - have learnt a lot and willing to mentor in the next round of training
- Very demanding but satisfying
- Learn by doing also work for the in-country mentors



Interviews and focus groups

Health manager's perspective:

- Skeptic at the beginning
- Want this program to continue but system has to be improved
- High level training can be carried out at the rural level
- Good relationship with the surrounding communities



Impact

At the individual level

- Increase in research skills which has resulted in some fellows undertaking further study in research, developing new research proposals, new employment opportunities and success in funding to continue work
- Potential train-the-trainer collaborations in the future, demonstrating ongoing capacity-building opportunities

At the local health service level

- Sharing of knowledge with other health workers in the health service and within the health service district building local implementation research capacity
- Changes in protocols and local level policy for example, improvements in water and sanitation facilities (SI)

At the broader health system level

- Evidence in strengthening in S & R
- Research fellows involved in this program are now part of a body of researchers who can engage with stakeholders, funders and policy makers to conduct locally relevant research with local research teams
- The importance of the role of IR for provincial health service design and implementation
- Stronger relationships between the Tropical Partners and in-country stakeholders: On-going engagement looking for opportunities to work together



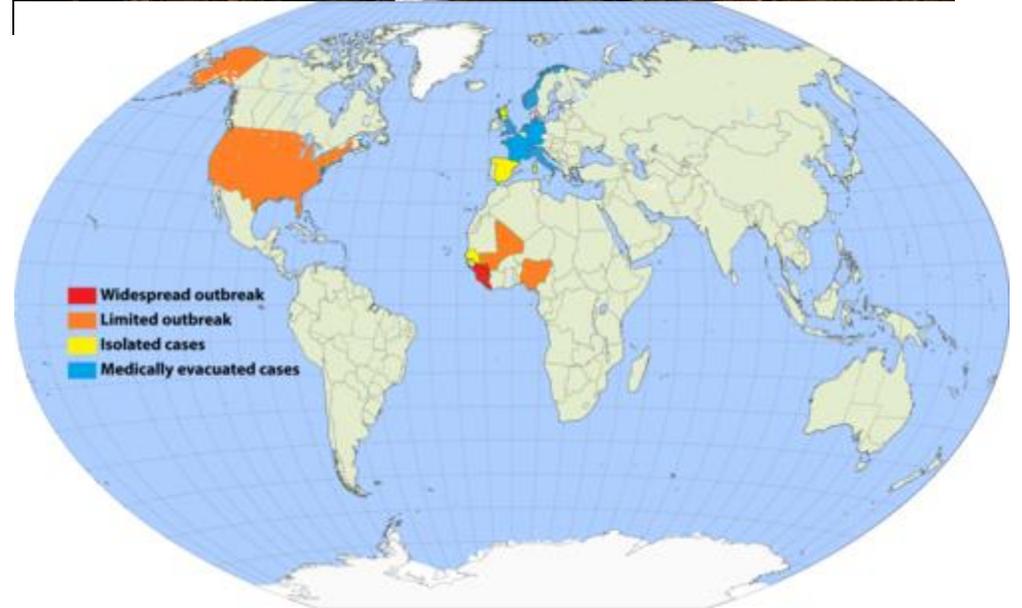
Questions?



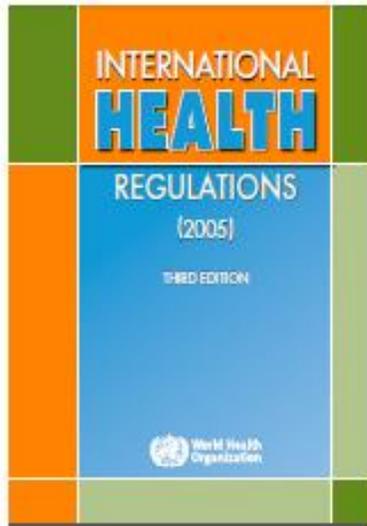
Theme 2. Emerging Infectious Diseases risk mapping in the Western Pacific



Motivation



Motivation



Theme 2. Emerging Infectious Diseases risk mapping in the Western Pacific

2a. Map Health System Preparedness in the Solomon Islands

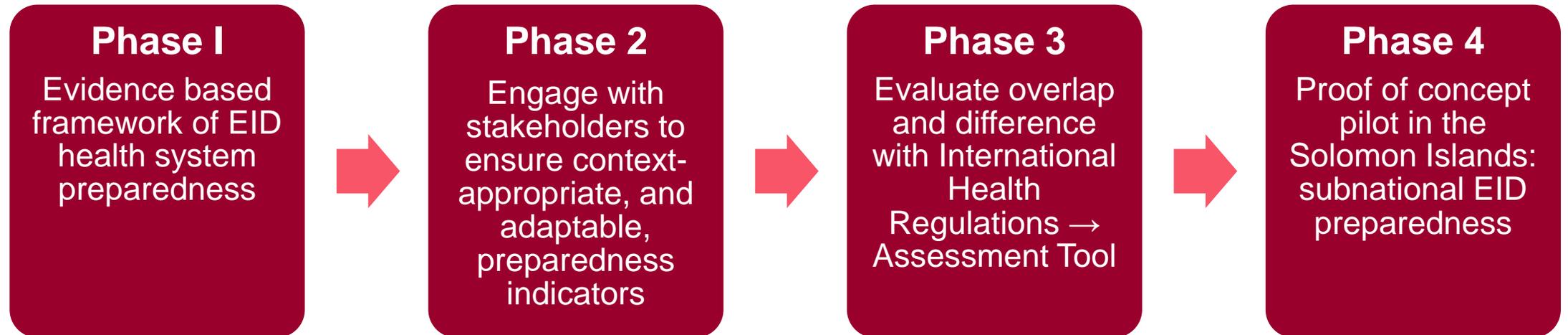
Ben Marais and Anna Pelagyi and Joel Negin



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Project Approach



Phase 1 - Aims

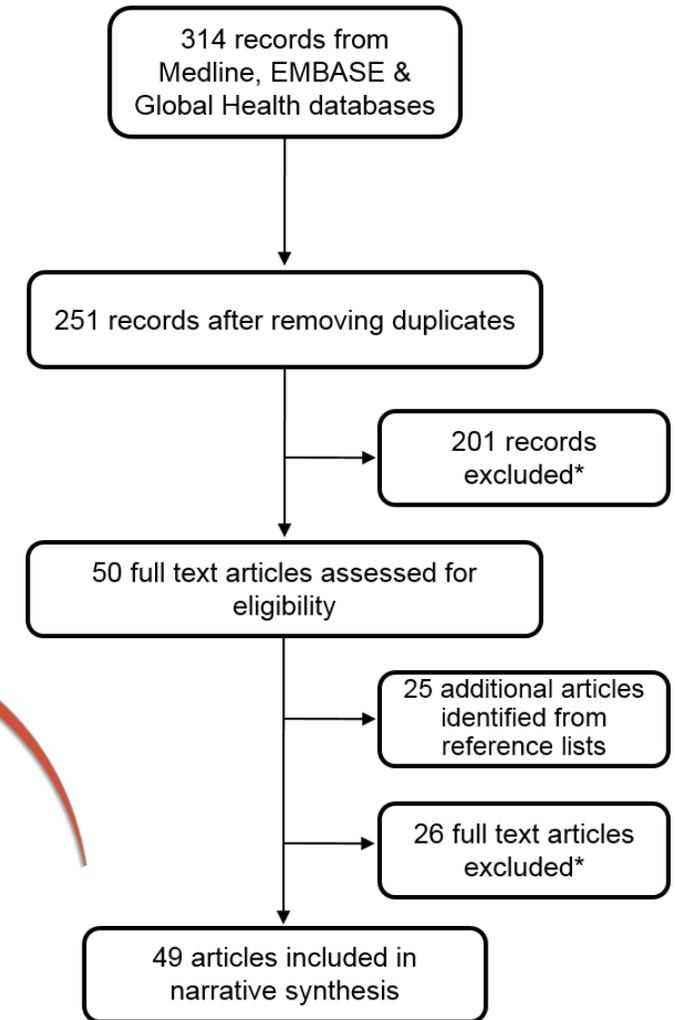
1. Undertake a comprehensive review of the available literature on health systems preparedness in the context of emerging infectious diseases, and
2. Use a modified narrative synthesis to subsequently develop a conceptual framework characterising health system preparedness for emerging infectious diseases.



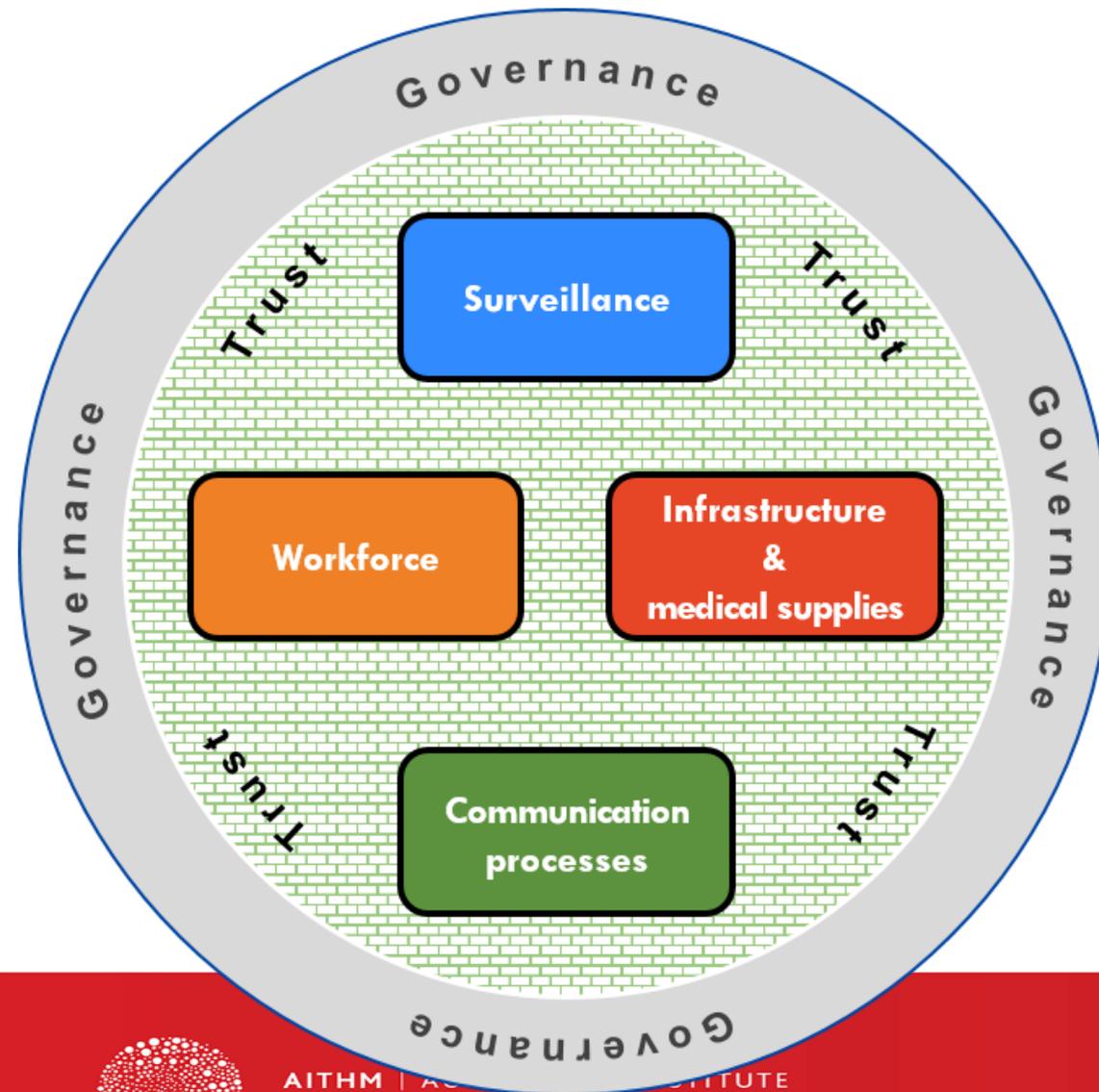
Narrative Review

- Health system performance outbreak: key elements
- Descriptive studies, systematic reviews, commentaries
- Specific focus on emerging low- and middle-income countries
- Narrative review method used to evaluate and synthesize literature

- 61% (30) 2014-2015 West African Ebola virus epidemic
- 14% (7) 2009 H1N1 influenza pandemic
- 6% severe acute respiratory syndrome (SARS), Middle East Respiratory Syndrome (MERS), Zika virus (1 article each)
- No published evidence from the Pacific region



Core Constructs of Health System EID Preparedness



Phase 2 & 3 – Engagement to ensure context-relevant preparedness indicators + IHR alignment

- 1) Improving access and use of available health systems **data** to aid International Health Regulation/health system preparedness assessment, monitoring and planning.
- 2) Develop and refine context-appropriate **indicators** for the simplified health system preparedness assessment framework to assisting provincial level preparedness assessments.



Health system preparedness in the Solomon Islands

- **Initiative 1** (improving access/use of health system data)

Relevant health system data accessible in original form to the MHMS Medical Statistics Unit, but...

No direct accessibility to the PHESU where the majority of preparedness planning occurs, and IHR capabilities are monitored.

Data not consolidated in a format helpful for IHR monitoring and health system preparedness planning.



| INFRASTRUCTURE & MEDICAL SUPPLIES | | WATER, SANITATION AND HYGIENE (WASH) |
|--|---|---|
| Health care facilities | Essential medicines & technologies | Hand washing facilities with soap/alcohol hand rub |
| General hospitals | Basic equipment availability (%) | Toilets available and usable in health facility |
| Urban health centres | Essential drug availability (%) | Water supply available and working in health facility |
| Area health centres L1 | Vaccine availability (%) | INFECTION PREVENTION & CONTROL (IPC) |
| Area health centres L2 | HEALTH WORKFORCE | Waste segregated in consultation area |
| Rural health centres | Skill set and numbers | Sharps container available and used |
| Community centres available for outreach | Doctors (total) | Sharps & infectious wastes treated and disposed safely |
| Inpatient beds | Doctors per 10,000 population | SERVICE UTILISATION |
| Isolation centres | Nurses (total) | Outpatient visits per person/year |
| Isolation centre beds | Nurses per 10,000 population | Hospital discharges per 100/year |
| Emergency patient transport | Nurses per catchment | Facility accreditation system in place |
| Equipment | Nurse aids per catchment | Audit meets standards of clinical practice |
| X-Ray machines | Midwives (total) | Audit meets facility infrastructure standards |
| Ultrasound machines | Midwives per catchment | <p>Key data sources:</p> <p>Census</p> <p>Demographic and Health Survey (DHS)</p> <p>SARA (Service Availability and Readiness Assessment)</p> <p>DHIS2</p> <p>Tupaia MediTrak</p> <p>mSupply</p> |
| Disposable face masks available | Field epidemiologists | |
| Disposable latex examination gloves available | Laboratory technicians | |
| Other PPE available, e.g. gowns, aprons, shoe covers | Risk communicators - MHMS | |
| Laboratory services | Risk communicators - community | |
| Laboratory operational | Traditional healers trained in IPC | |
| Laboratory accredited | Community-based health workers* | |
| Malaria RDT kits available | Training and support | |
| Dengue RDT kits available | Health workers receiving in-service training in last year | |
| Other rapid diagnostic tests | Supportive supervision visit from PHESU in last 3 mths | |
| Specimen collection kits available | Average number of hours worked per week | |
| Specimen transport boxes available | Provider absenteeism rate | |
| Refrigerator available and working | Workforce loss in last year | |
| Freezer available and working | Risk cover – health/disability insurance, workers comp. | |
| Mechanism for specimen transport to national lab | | |

Health system indicator mapping – Tupaia partnership

Tupaia platform (Michael Nunan, Beyond Essential Solutions): interactive online map; bird's eye view of availability of medicines, equipment, infrastructure, staff and services

Already significant progress with the collation of provincial-level health system data in the Solomon Islands (SARA, mSupply)

Lending their skills to develop a health system preparedness/ IHR compliance dashboard in Tupaia

- Easy, consolidated access for the PHESU to the core set of health system preparedness indicators

Health system preparedness in the Solomon Islands

Initiative 2 (context-relevant, provincial assessment framework)

2018 revision of the IHR self-assessment annual reporting tool (Kluge et al., 2018):

worthwhile step towards acknowledging importance of strong resilient health systems for the implementation of the IHR, and

a need to integrate the core capacities with essential public health functions.

Aligns with the Joint External Evaluation assessment framework and scoring system (Level 1 → 5)

Request from PHESU to adapt this tool (rather than re-invent) for ease of application in the Solomon Islands



| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Key documents & data |
|--|--|--|--|--|---|--|
| Resilient health services | | | | | | |
| Event-related case management capacity (including screening processes) | No up-to-date (developed/updated within the past 5 years) national clinical guidelines for the management of priority public health risks. | National clinical guidelines for priority public health risks developed and distributed to all levels. AND Up-to-date list of designated referral health care facilities available and in place. | National clinical guidelines for priority public health risks <i>implemented in the designated referral health care facilities</i> at the national level. AND Adequate resources essential for case management for priority public health emergencies are accessible for the designated referral health care facilities at the national level. | National clinical guidelines for priority public health risks are implemented in designated referral health care facilities at the national, <i>intermediate and local levels</i> . AND Adequate resources essential for case management for priority public health emergencies are accessible for the designated referral hospitals at the national <i>and provincial level</i> . | National clinical guidelines for priority public health risks are revised and updated on a regular basis (every 5 years). AND Case management services are assessed as part of the national accreditation system or other national external evaluation system for all health care facilities on national, intermediate and local levels on a regular basis. | <ul style="list-style-type: none"> •MHMS endorsed list of priority national public health risks •National clinical guidelines for priority public health risks •List of designated referral facilities •List of provincial level health care facilities - Hospitals, AHCs and RHCs •Any clinical case management accreditation documents |
| IPC and WASH in health care facilities | National IPC programme not yet established. AND/OR National WASH and environmental health standards not yet established. | National IPC programme is in place and is implemented at the national level. AND National WASH and environmental health standards in place and implemented at the national level. | National IPC programme is in place and is implemented at the national and provincial levels. AND National WASH and environmental health standards in place and implemented at the national and provincial levels. | Monitoring, audit and feedback system for IPC programmes functioning at national and provincial levels. AND Monitoring, audit and feedback system for WASH programmes functioning at national and provincial levels. | Tools for ongoing improvements of WASH services in health care facilities in place and integrated with other national health service quality processes. AND Effectiveness of IPC and WASH programmes evaluated every 5 years at national and provincial level (national accreditation system or external evaluation) and national IPC & WASH guidelines/strategy revised. | <ul style="list-style-type: none"> •National WASH strategic plan (current) •National IPC guidelines (current) •List of designated WASH personnel (national and provincial) •List of designated IPC personnel (national and provincial) •IPC training records for national and provincial HWs •Facility IPC audit checklist and reports (min 1 per facility per year) •Facility WASH audit checklist and reports (min 1 per facility per year) •Evidence of use of WHO WASH FIT guidelines (or similar) |

| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Key documents & data |
|---|--|---|---|--|--|--|
| | outpatient visits per person per year <1.00 as national aggregate) | outpatient visits per person per year 1.0 ≤ X < 2.0 in both urban and rural areas) | outpatient visits per person per year ≥2.0 in both urban and rural areas) AND National facility registration system in place and operational at designated referral health care facilities at the national level. | department visits per person per year ≥3.0 including by geographic disaggregation). AND National facility registration system in place and operational for health care facilities at national level and provincial levels. | (including PHC facilities) are registered according to national accreditation guidelines. | for scope of services) •List of registered health care facilities, by province |
| Risk communication | | | | | | |
| Institutional structure (strategy/plan/protocol) for emergency risk communication | Multi-hazard risk communication plan is <i>not in place</i> or still in development | Multi-hazard risk communication plan is in place at the national level, with allocated funds and human resources dedicated to risk communication | Multi-hazard risk communication plan is in place at the national level with <i>inter-agency involvement from all relevant sectors</i> | Multi-hazard, multi-agency risk communication plans are resourced and operational at both <i>national and provincial levels</i> | National multi-hazard, multi-agency risk communication plan is <i>revised on an annual basis</i> , following simulation exercises or after action reviews; lessons learned are shared with regional/international community | <ul style="list-style-type: none"> •National + provincial risk communication plan (or/ evidence of integration into emergency response plans) •List of gov/non-gov agencies linked into risk communication plan •Proof of sustained budget + human resources dedicated to risk communication •Evidence of annual risk communication plan review (+simulation) •Evidence of sharing lessons learned with regional/international community |
| Competencies for the practice of emergency risk communication | Can make public announcements and provide information through media (including social media) during a public health event, but this is done so in an ad-hoc manner. i.e. without previous planning or strategy | Capacities to <i>pro-actively engage</i> with the public and affected communities through different media (including social media) are in place at the national level; trained spokespeople at different levels of government | Capacities to pro-actively engage with the public and affected communities in <i>local language</i> are in place at <i>both national and provincial levels</i> <u>AND</u> Mechanisms to <i>obtain and incorporate feedback from communities</i> about communication interventions on a regular basis are in place at <i>both national and provincial levels</i> | Risk communication interventions are able to be targeted to different stakeholders (e.g. gov/NGO partners, health workers, communities, community leaders, media, donors): <ul style="list-style-type: none"> • social mobilization • community engagement • approaches to reach tribal communities • mainstream media/social media/websites | Collaborative response by government, partners, media and communities to provide health advice that addresses misinformation and community concerns on a regular basis; <ul style="list-style-type: none"> • monitoring of media/social media/community meetings in emergencies to correct errors or rumours, address misconceptions, gather opinions | <ul style="list-style-type: none"> • List of staff with communications expertise • Details of formal training program(s) undertaken by risk communicators, emergency response staff and decision-makers • List of public communication channels used to reach audiences in emergencies • Details of network(s) engaged in communication/media response, and frequency of meetings • Details of community mobilization/engagement strategies for implementation in public health emergencies |

Data visualization – Tupaia partnership

[Tupaia IHR monitoring platform](#)



International Health Regulations, Solomon Islands

eg Surgical



- Previous
- Central Province
- Choiseul Province
- Guadalcanal Province
- Honiara
- Isabel Province
- Makira-Ulawa Province
- Malaita Province
- Rennell and Bellona Province
- Temotu Province
- Western Province
- Next

Food safety

Laboratory

Access to laboratory testing capacity

Implementation of laboratory biosafety and biosecurity regime

Implementation of laboratory quality standards

Laboratory

Mechanisms for specimen transport, testing and feedback



Central Province Honiara Western Province

Final Steps

Refine subnational assessment framework

Report on Solomon Islands national and subnational IHR capacities/health system preparedness

Work with Tupaia to refine IHR dashboard and visualisations

Integrate data collected last week during provincial level health system assessment (Renbel and Western provinces) to populate the Tupaia dashboard

Testing by the Solomon Islands PHESU and MHMS stakeholders

assessment of functionality and acceptability of the platform

follow-up discussions with the MHMS, PHESU and Medical Statistics Unit regarding ongoing use and DHIS2 integration



Pandemic. A policy makers' risk-assessment tool for emerging infectious diseases

Emma McBryde





3a Adeshina Adekunle



2b Bosco Ho

Motivation: Regional evaluation of risk of Ebola

- Need for a rough estimate of risk of importation of emerging infectious diseases
- Disease Agnostic: user controlled
- Early in the epidemic
- Some room for early intervention assessment



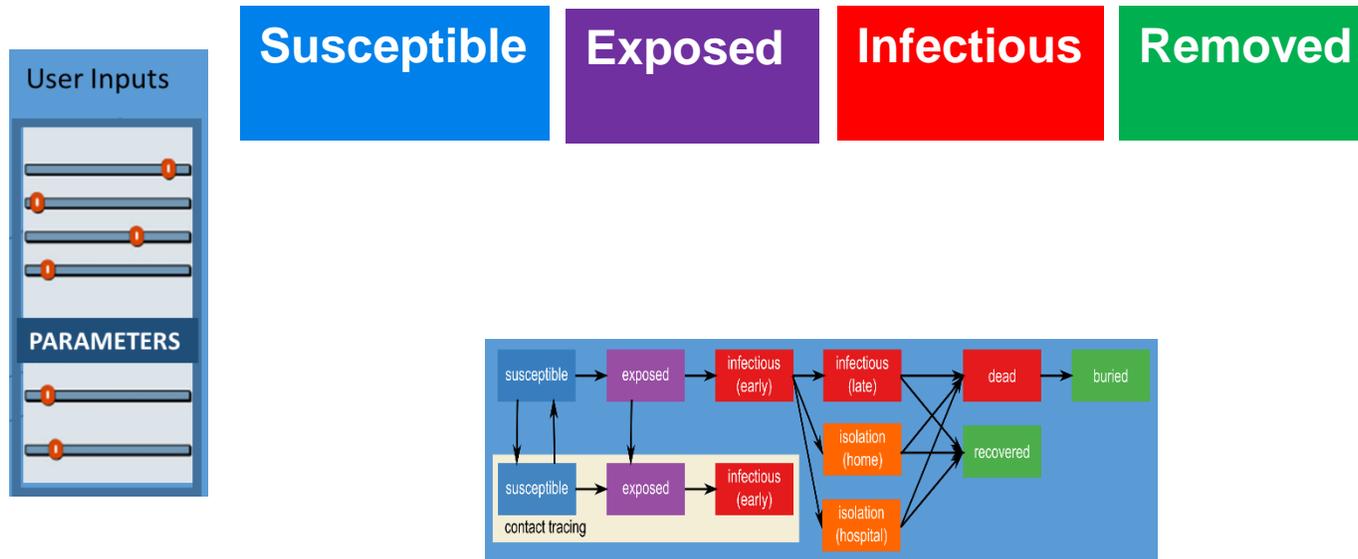
Methods

- Using javascript we developed a website meta-population model which simulates the spread of infectious diseases within and across country borders.
- User inputs specify source country, prevalence and features of the infection
- ~200 countries are included and we have traffic between them using a matrix with flight data purchased from OAG for February 2014. (to be updated)
- Infectious diseases transmission model: which can be selected by the user



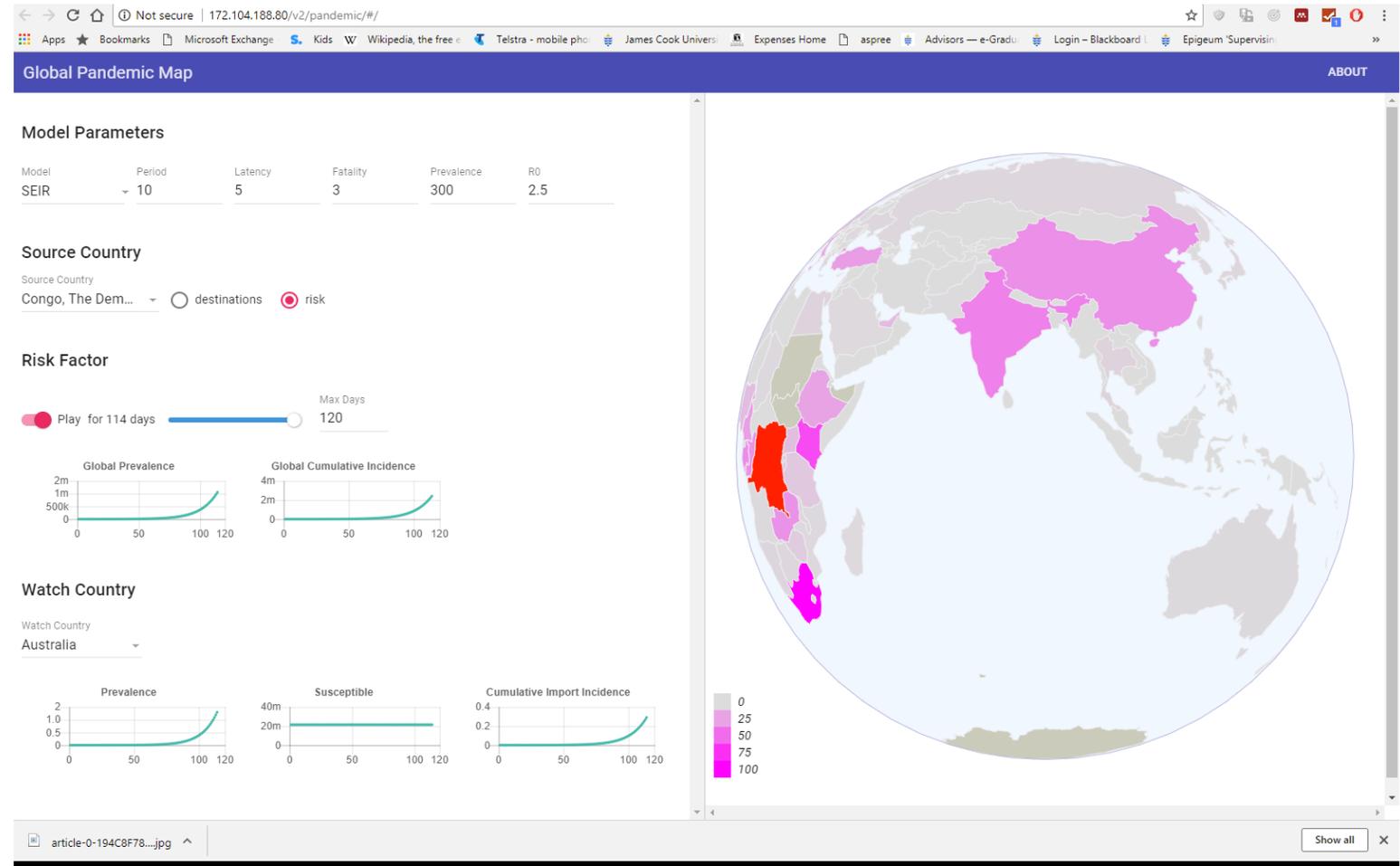
Methods

User inputs specify source country and prevalence.



Results

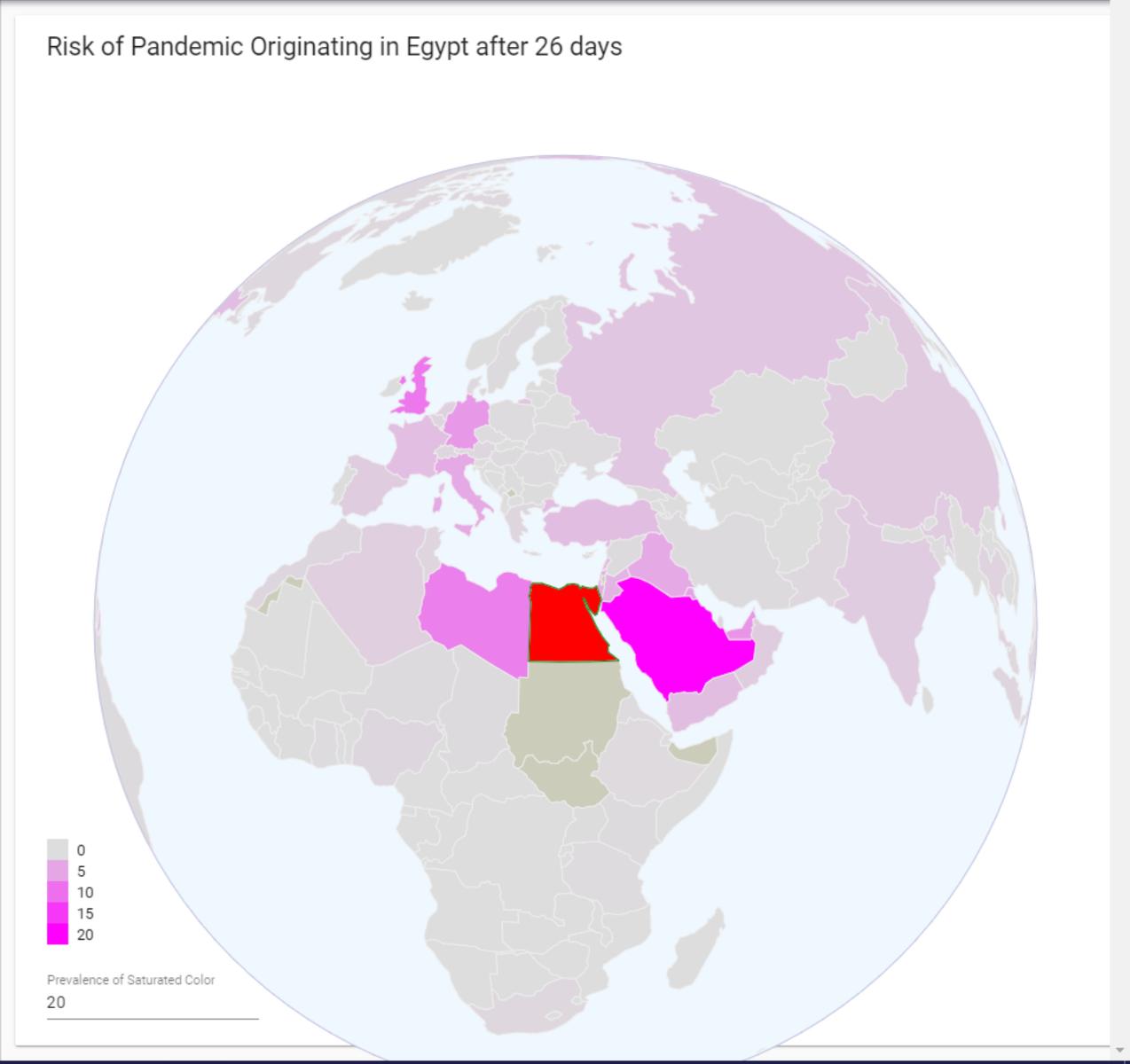
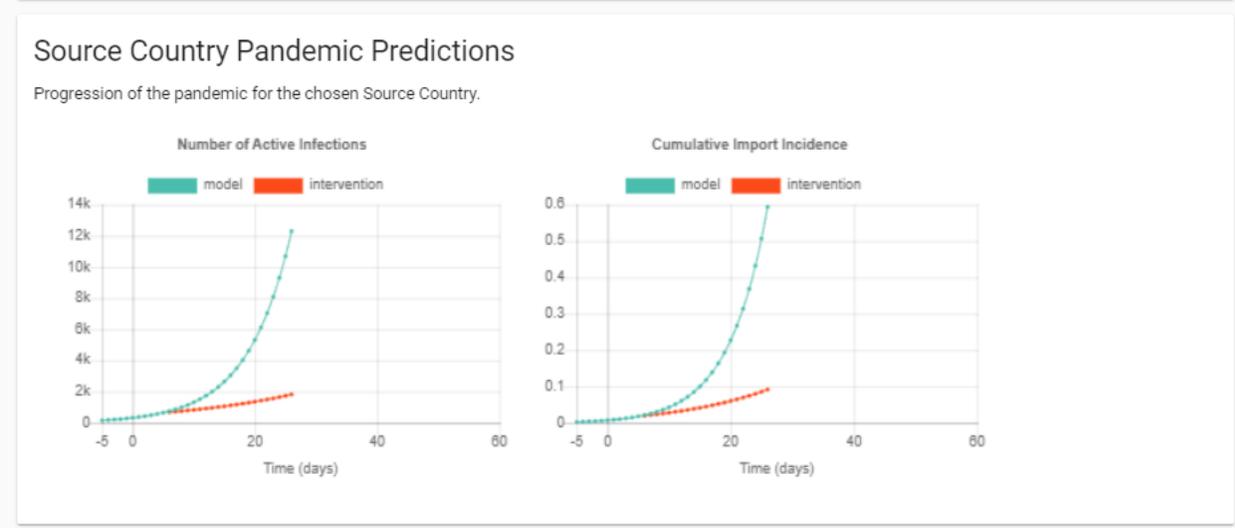
Figure 1. Existing program, available on website: 172.104.188.80/v2/pandemic/#!/



Animate

Day 26

Max days on chart
60



Outputs

Online tool available to public

Manuscripts in progress

Interactive Population Dynamics Simulations on the Web

Abstract

Compartment models are one of the primary tools used to explore population dynamics in such fields as ecology and epidemiology. Whilst immensely useful to experts in mathematical modelling, it has proven difficult to distribute accessible software that allows non-experts to explore such compartmental models. Here, we describe a suite of tools to build interactive compartment models directly in the web-browser that dramatically simplifies the deployment of compartmental models. To demonstrate this, we describe a geospatial compartmental model consisting of 220 interacting units, written as a purely Javascript web app. The web app performs well allowing a highly interactive exploration of the model in an intuitive manner, resulting in a compelling user interface. This demonstrates that for compartmental models of a certain complexity, a purely Javascript web app provides a solid alternative in deploying exploratory compartmental models for non-experts.

Introduction

Compartmental models of population dynamics are one of the principal approaches to modelling in fields such as ecology and epidemiology. It has also been fruitfully applied to model imperial pathogenesis, radical violence and financial cycles in macroeconomics.

Whilst the building of models is well established, presenting these models for non-experts has proven somewhat difficult. Interactive software in biomedical research are often written as desktop applications, which requires effort to install, and for the developer, considerable effort to write, as supporting multiple platforms represents a significant investment in resources.

In contrast, we show that if the model is sufficiently modest, then the entire modelling process and visualisation can be written in Javascript, and thus be developed as a simple web app. This opens up the possibility of building a rich interactive interface that is



Policy Implications:

Current model: A rapid assessment of country-level risk of EIDs

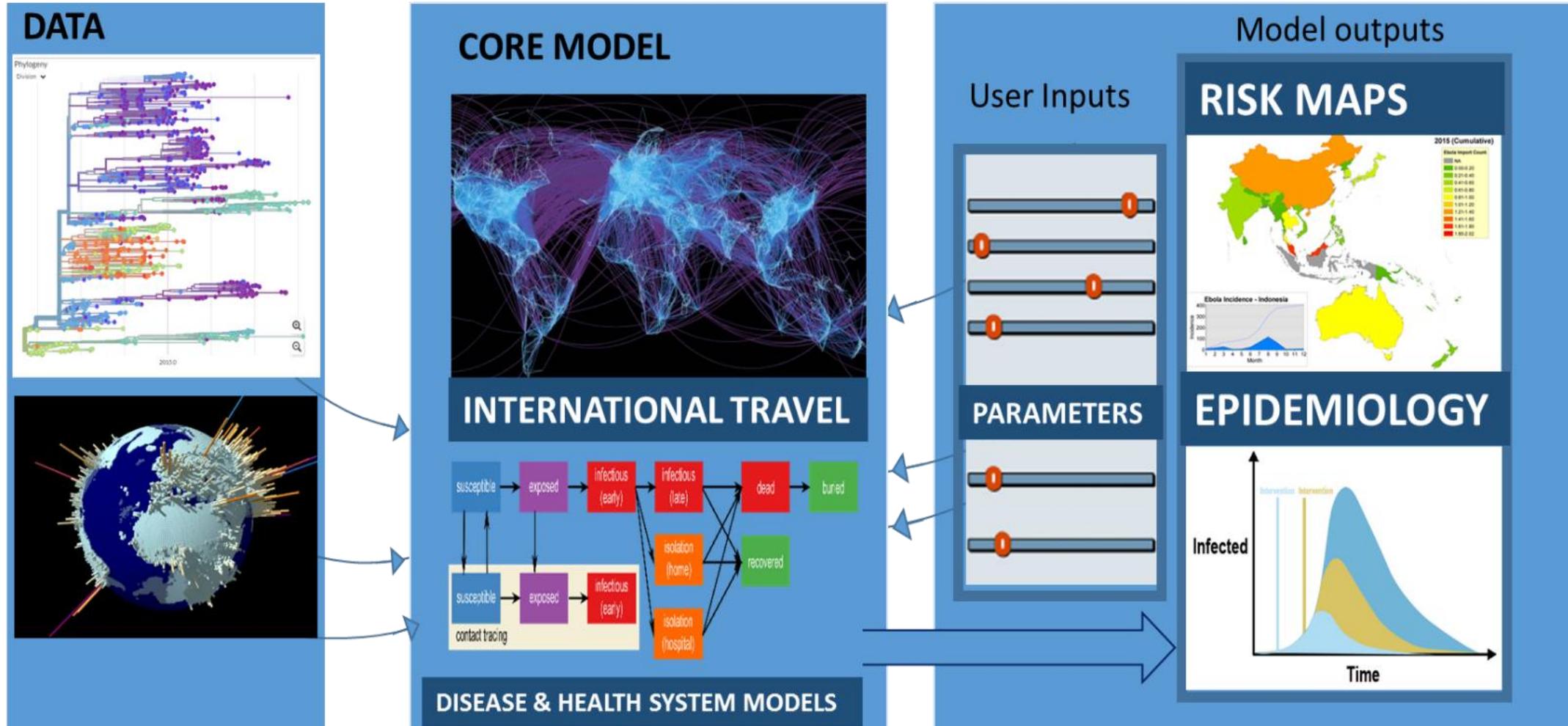
risk to Australia through travel is small in early epidemic outbreaks arising in Western Africa

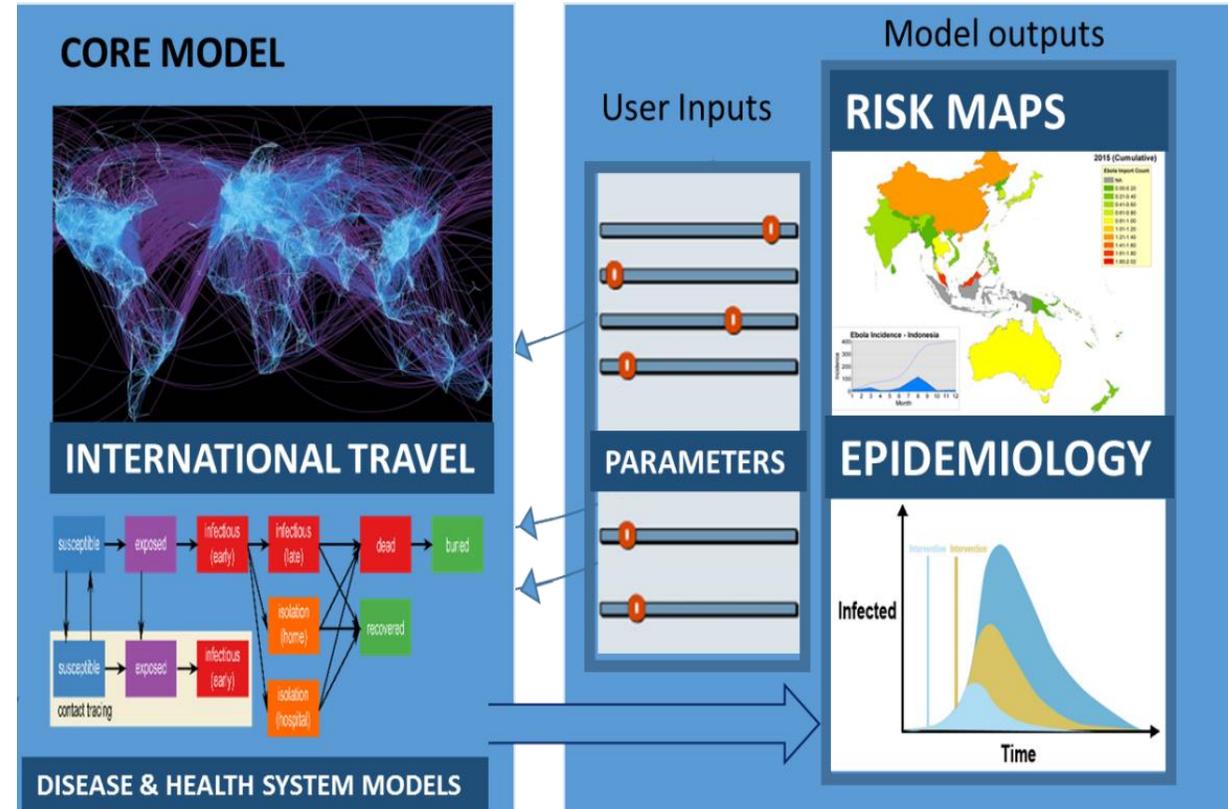
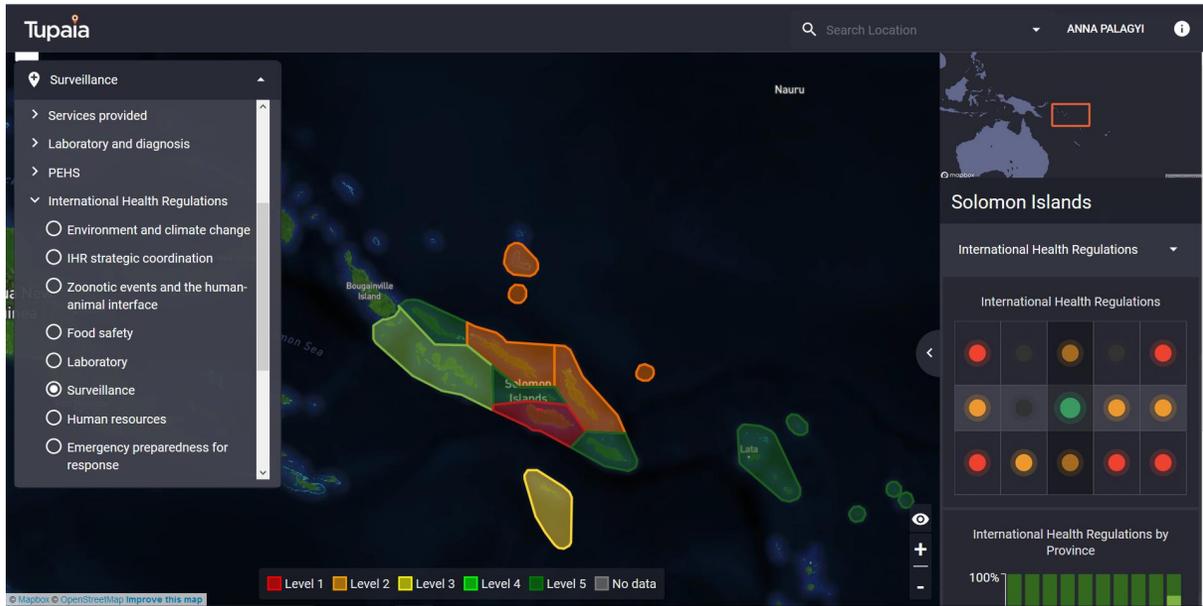
reduction of travel volumes along some routes/testing at airports for illness and other traveler related actions are ineffective

Complete model: insights as to the best allocation of funds and programs to have greatest impact on EIDs.



Future

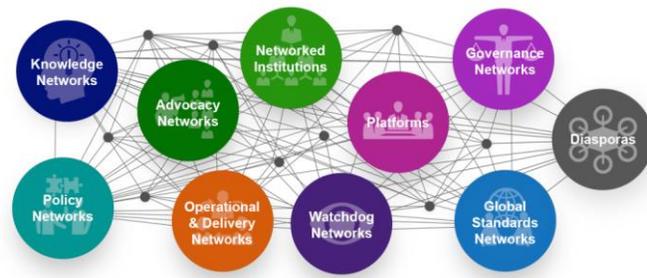




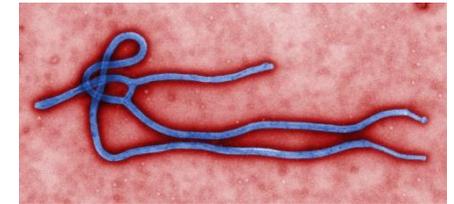
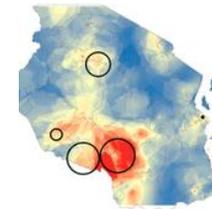
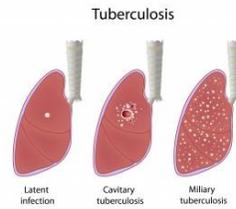
Theme 3: collaborations, field studies, based on existing research relationships



Theme 2 Systems and communication



Theme 3 Collaborative Scientific projects



Theme 1 Capacity building





Questions for the panel

What lessons were learned through this collaborative research process ?

What are the major gaps in surveillance and response ?

What is the next step in collaborative engagement ?

What role do policy-makers play in this work e.g. National Departments ?

What impact has this work made and how can you evaluate that impact ?







Australian High Commission, Solomon Islands

4 June at 09:31 · 🌐

Very impressed by the final presentations from the Capacity Building Workshops in Infectious Disease Surveillance in Atoifi, East Malaita. Australia is proud to support this initiative under the Tropical Partners project through #jamescookuniversity, which supported 24 health workers from across #solomonislands and #png to undertake an operational research project in their field of work. Fiona Mulhearn, First Secretary for Health and David Futai, Health Program Manager had a ball at the graduation ceremony, with amazing cultural performances by the Kwainaisi Cultural Centre.

