

Outcomes from the Global Delphi Studies

Simon Craig

Overview

- Delphi technique
- Paediatric Emergency Research Networks
- Global priorities



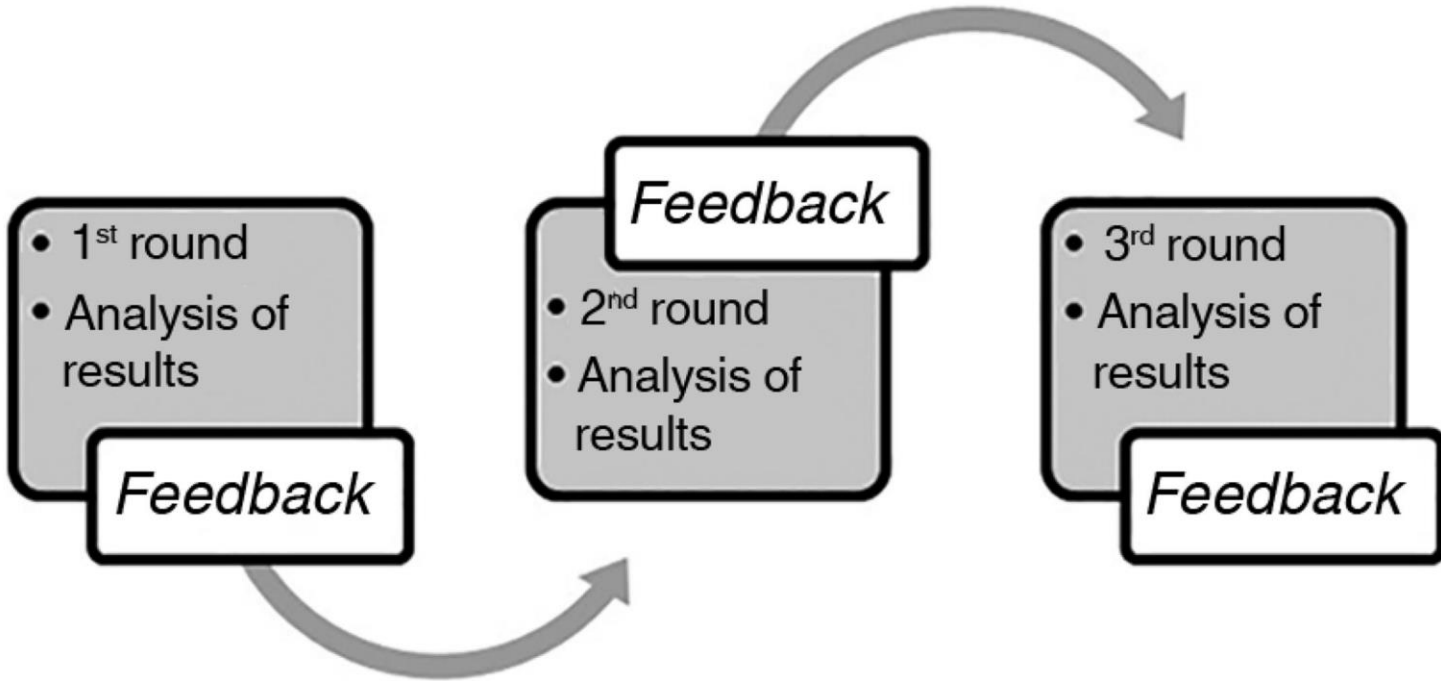


Delphi: Key Ingredients

- Experts
- Anonymous completion of questionnaires
- Rounds of feedback
- Consensus



Delphi Technique



“Modified” Delphi



- Facilitated meeting between group members
- Structured discussion
- Reach consensus

Paediatric Emergency Research Networks





PERUKI

***Paediatric Emergency Research in the
United Kingdom & Ireland***

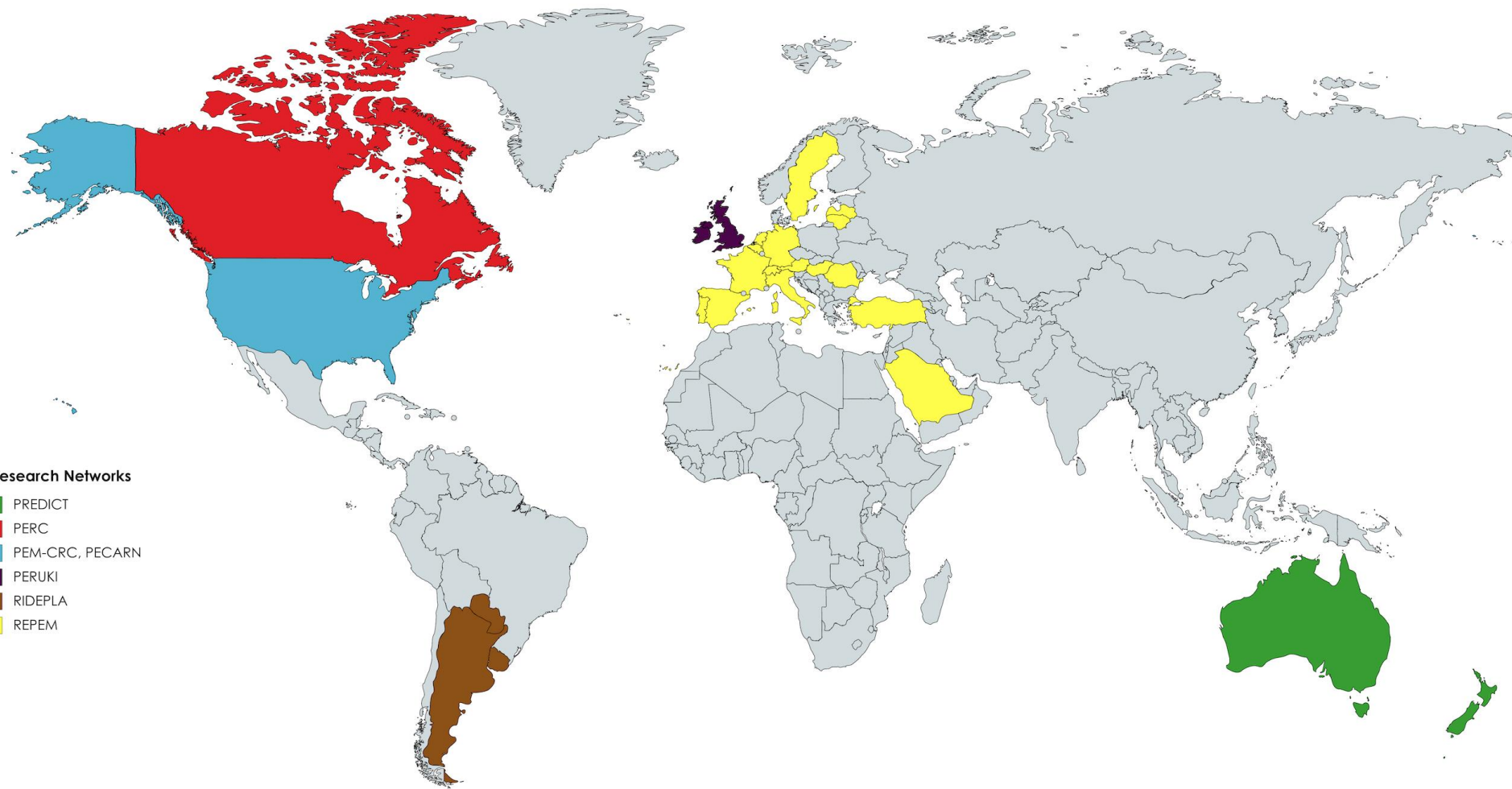
Improving the emergency care of children through research



[RIDEPLA \(@ridepla\) | Twitter](#)



**Paediatric Research in
Emergency Departments
International Collaborative**



Research Networks

- PREDICT
- PERC
- PEM-CRC, PECARN
- PERUKI
- RIDEPLA
- REPEM



Local Research Priorities



Establishing the research priorities of paediatric emergency medicine clinicians in the UK and Ireland

Stuart Ha
Francesca

Revisiting the Emergency Medicine Services for Children Research Agenda: Priorities for Multicenter Research in Pediatric Emergency Care

Steven Zane Miller,
Emergency Care Ap

Pediatric Emergency Research Canada (PERC): Patient/Family-informed Research Priorities for Pediatric Emergency Medicine

Liza Bialy, MPH, Amy C.
David W. Johnson, MD,
on behalf of Pediatric Em

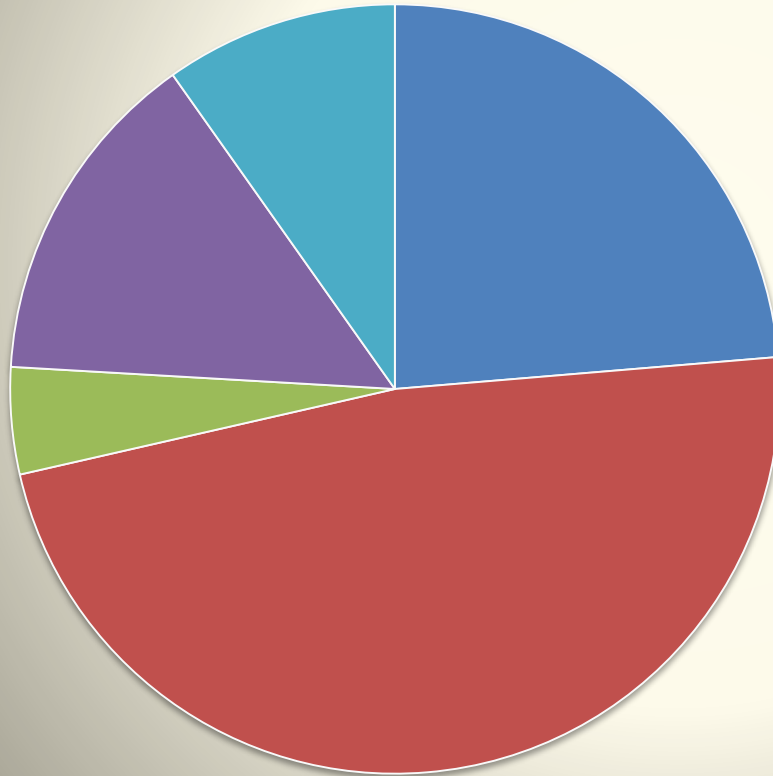
PREDICT prioritisation study: establishing the research priorities of paediatric emergency medicine physicians in Australia and New Zealand

Heather Carol Deane,^{1,2} Catherine L Wilson,² Franz E Babl,^{1,2} Stuart R Dalziel,^{3,4}
John Alexander Cheek,^{1,5} Simon S Craig,^{5,6} Ed Oakley,^{1,2} Meredith Borland,^{7,8}
Nicholas G Cheng,⁹ Michael Zhang,¹⁰ Elizabeth Cotterell,¹¹ Tibor Schuster,^{12,13}
David Krieser,^{12,14} on behalf of the PREDICT Research Network

PREDICT priorities

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- Duplicate of another question
- Evidence already exists / study in progress
- Not amenable to multicentre research
- No evidence
- Not framed as a "PICO" question



PREDICT priorities

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- Severe asthma
- UTI – oral vs IV antibiotics
- Cervical spine injury
- Emergency intubation
 - Checklists
 - High-flow for apnoeic oxygenation
- Acute limp
- Abdominal pain / appendicitis
- Sepsis – fluids, protocols
- Procedural sedation
- Trauma and TXA
- Fractures



Global Research Priorities





Academic Emergency Medicine

Official Journal of the Society for Academic Emergency Medicine

Consensus Conference

Pediatric Emergency Care Research Networks: A Research Agenda

Michael J. Stoner MD , Prashant Mahajan MD,MPH,MBA, Silvia Bressan MD,PhD, Samuel H. F. Lam MD,MPH, Corrie E. Chumpitazi MD,MS, Aaron E. Kornblith MD, Seth W. Linakis MD,MA, Damian Roland BMedSci,MBBS,MRCPCH,PhD, Stephen B. Freedman MDCM,MSc, Lise E. Nigrovic MD,MPH, Kurt Denninghoff MD, Paul Ishimine MD, Nathan Kuppermann MD,MPH, ... [See fewer authors](#) ^



Experts

- Working group of 11 PEM researchers
 - 8 PEM multicentre research networks
- Developed initial themes

Initial themes

- 1) Clinical care
- 2) Technology
- 3) Knowledge Translation
- 4) Organization/administration



More Experts!



Process

- Modified Delphi process
- 3 rounds of electronic surveys
- 1 face-to-face meeting



Electronic surveys

- 1: Rank 66 priorities + add new topics
- 2: Rank 46 topics + add clinical topics
- 3: Rank 67 priorities





Academic Emergency Medicine Consensus Conference

Aligning the Pediatric Emergency Medicine Research
Agenda to Reduce Health Outcome Gaps

Tuesday, May 15, 2018



Face-to-face

- 47 priorities discussed
- 40 participants
 - 7 from working group
 - 33 new participants



Face-to-face

- Each theme discussed
- Consensus reached on all themes apart from clinical priorities



Electronic survey

- One further survey distributed to original expert group



Global Research Priorities



Technology

- Using the EHR for predictive analytics
- Machine learning
- Telemedicine (provider to provider)
- Simulation training
- Clinical decision support via the EHR



Knowledge Translation

- Dissemination and implementation of evidence-based practice
- Changing provider behavior - motivations and metrics
- How to identify priority topics for KT
- Shared patient decision-making in network research
- Develop KT strategies – using PEM research networks disseminate / implement to all emergency care settings



Organizational research

- Barriers to reporting data, building registries
- Research collaboration between PEM, EMS, and non-PEM providers; evidence dissemination
- Network resource utilization / economies of scale
- Global identification of "top 5" research questions and collaboration to answer those questions
- Exception from informed consent (EFIC) for time-sensitive enrollment of patients in the ED



Clinical

- Sepsis (identification, fluids, protocols)
- Trauma (head, cervical spine, blunt torso)
- Respiratory (pneumonia, bronchiolitis, asthma)
- Pharmacology / sedation
- Mental health
- Miscellaneous



Questions?

?

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