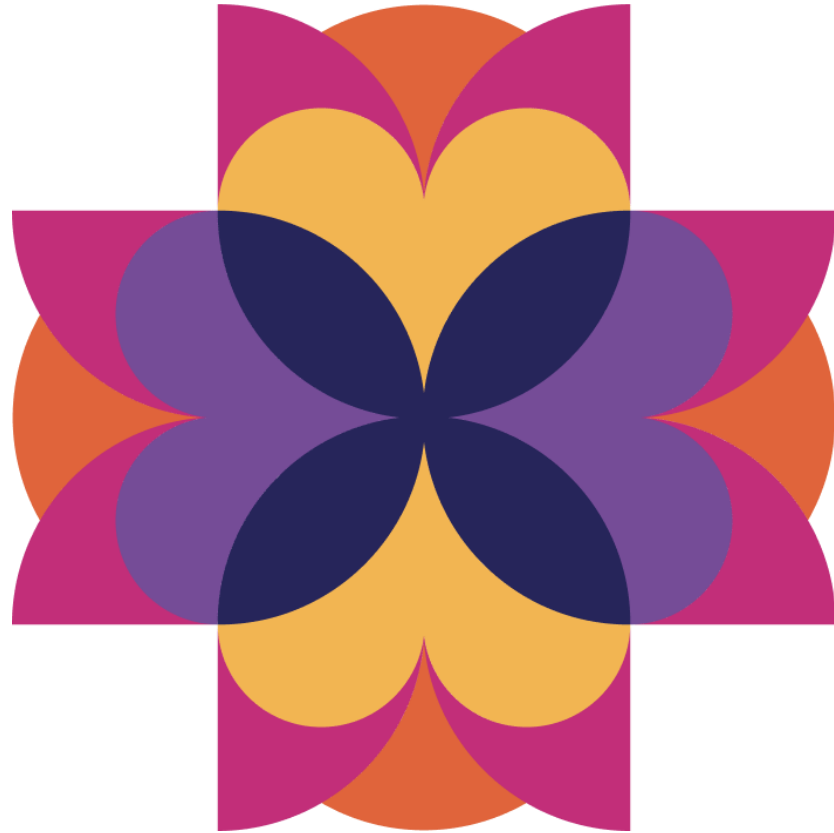




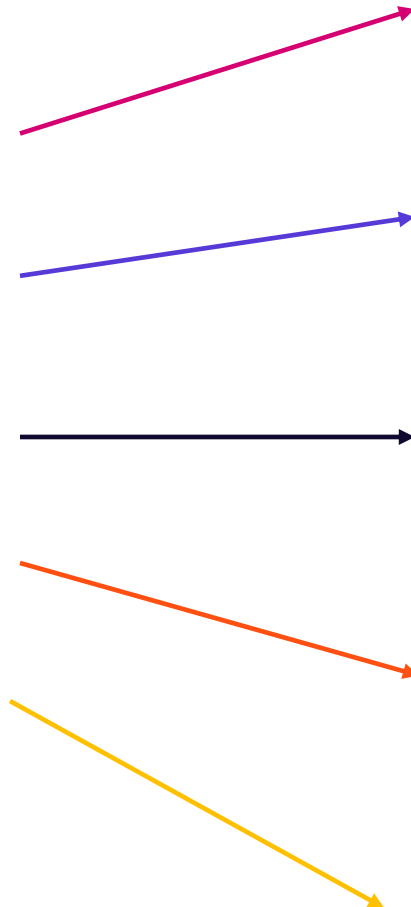
Research Methodologies in Public Health

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Exploring Research Methodologies at Imperial School of Public Health through the Laidlaw Scholarship



Qualitative & Quantitative Research Methodologies
Major Public Health Challenges: Dementia, School Absence, Mobile Phone Impacts



Systematic Review of the Impact of Digital Health Technologies in the form of Mobile Applications on Dementia Care

Peer review of a Cross-Sectional National Survey and Secondary Data Analysis on UK Health Deprivation

Narrative Review and Synthesis of MDT Expert Perspectives and Priorities from UK and USA School Absence Workshops

Modified Delphi Study to Define Optimal Outcomes for a UK Intervention Study on School Absence and Sexual Harm

Analysis of Prospective Cohort Data to Evaluate the Impact of Mobile Phones on the Grip and Pinch Strength in Adolescents



Digital Health in Dementia Care: A Systematic Review

- Dementia affects 1 million people in the UK with care costs exceeding £42 billion.
- Mobile health applications are increasingly transforming dementia care.
- A systematic review was undertaken on the impact of these technologies.

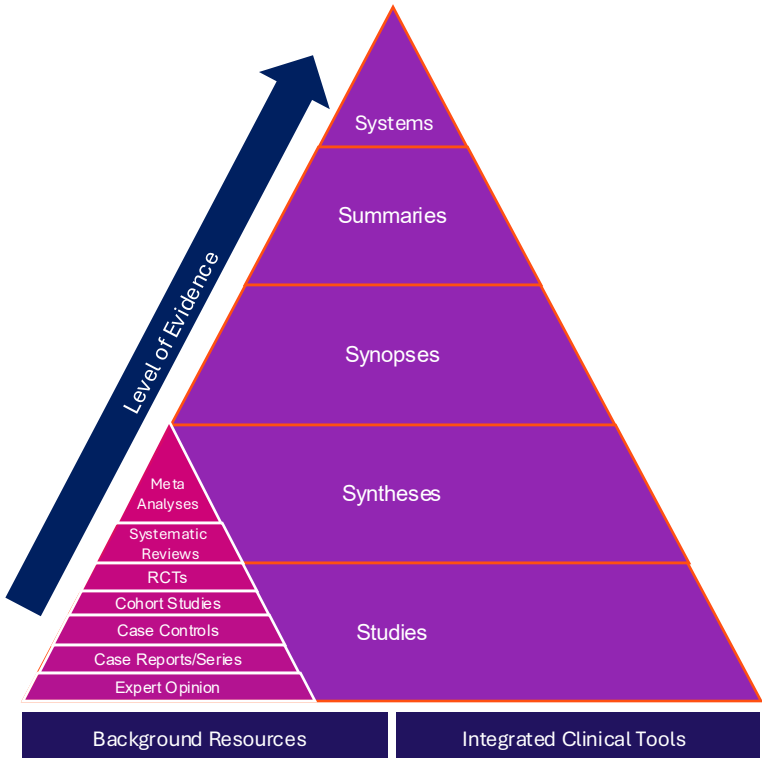


Figure 1: A hierarchy of medical evidence (adapted from Haynes, 2006)

Key Stages:

- Cochrane online learning
- Search strategy
- Protocol registration
- Dual screening
- Paper review

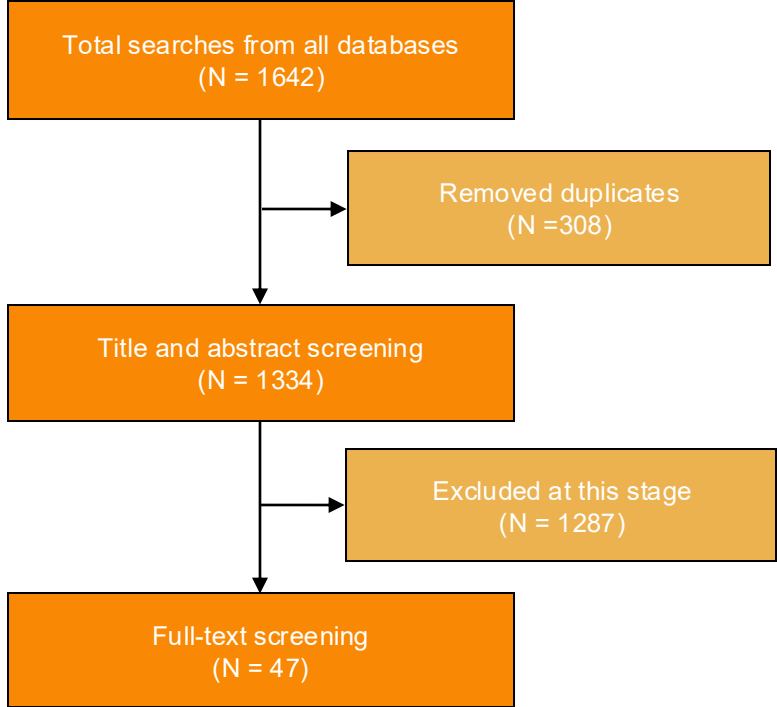


Figure 2: PRISMA diagram for the digital health systematic review



School Absence: Delphi Study and Narrative Review

- School absence is a national crisis.
- Overall school absence rates 6.9%, persistent absence 18.7% (2024/5).
- School absence disproportionately affects some groups.
- This study sought perspectives on absence from UK and US intersectoral experts.
- A Delphi method was used to define outcomes for an intervention study on school absence.



Key Stages:

- 5 outcome domains
- Nominal group technique
- Iterative Delphi surveys
- Expert consensus
- Co-design with children

Figure 3: The modified Delphi method

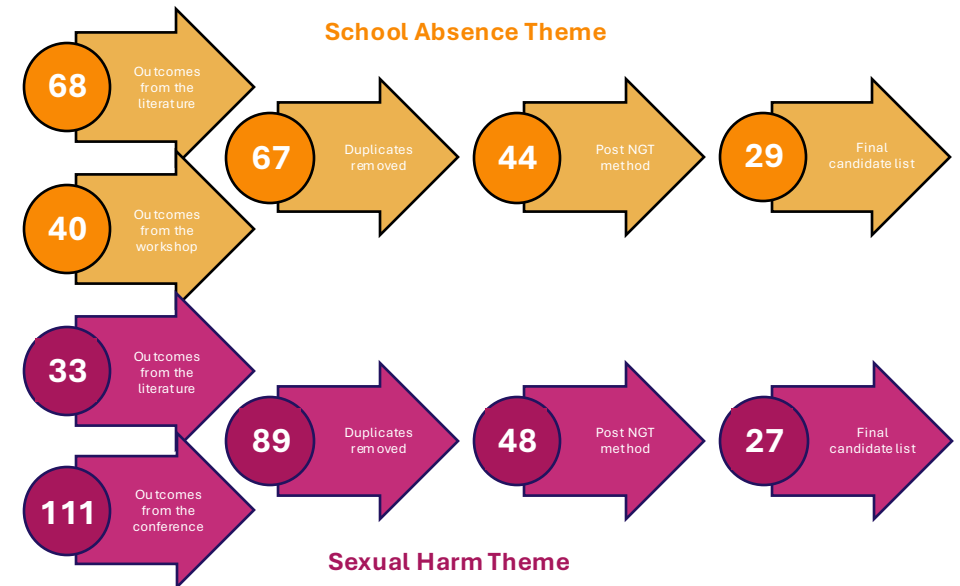


Figure 4: Defining a candidate outcome list

Laidlaw Reflections:



'The Laidlaw Scholarship has offered an invaluable opportunity to engage in qualitative and quantitative public health research alongside experts'

'I have acquired a much deeper understanding of the strengths and limitations of public health research methodologies and their potential sources of bias'

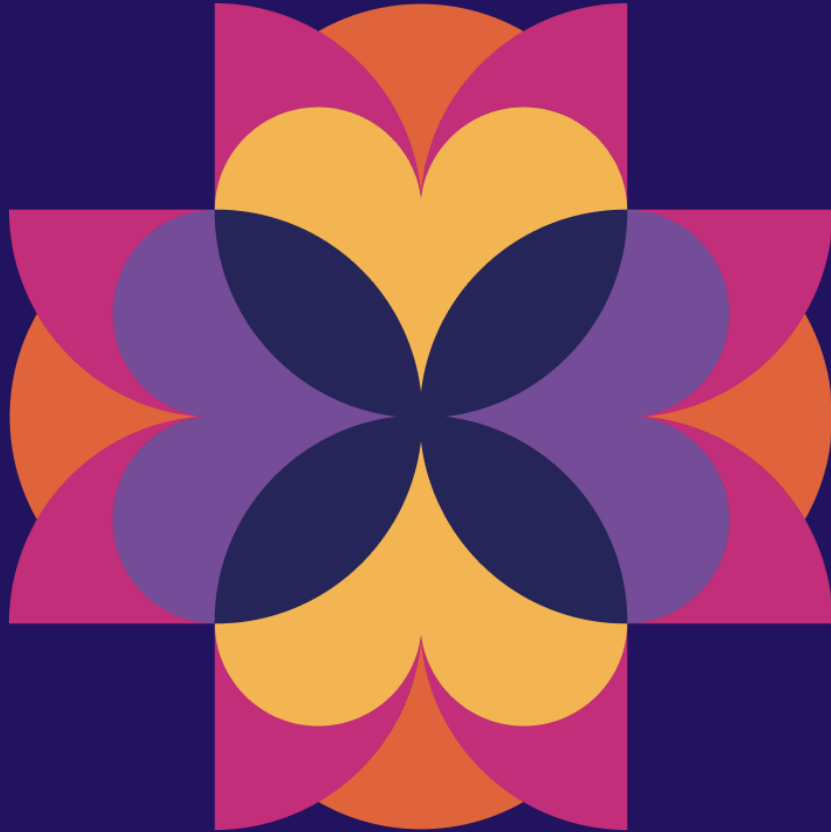
'I have explored the practical and ethical aspects of public health research'

'I have learned the principles that underpin robust and responsible research'

'I have appreciated the vital role of research in advancing clinical knowledge, guiding evidence-based practice and promoting ethical patient-centered care'

'I wish to express my gratitude to all the research teams at Imperial School of Public Health who have offered their mentorship, time and immense expertise'

Bravery in Research



Addressing major health challenges

Challenging political, cultural and social norms

Engaging with vulnerable populations

Facing uncomfortable truths and risking failure

Co-designing bold research interventions

Personal confidence, humility and vulnerability



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