



ARF/RHD

What we know we don't know but we should

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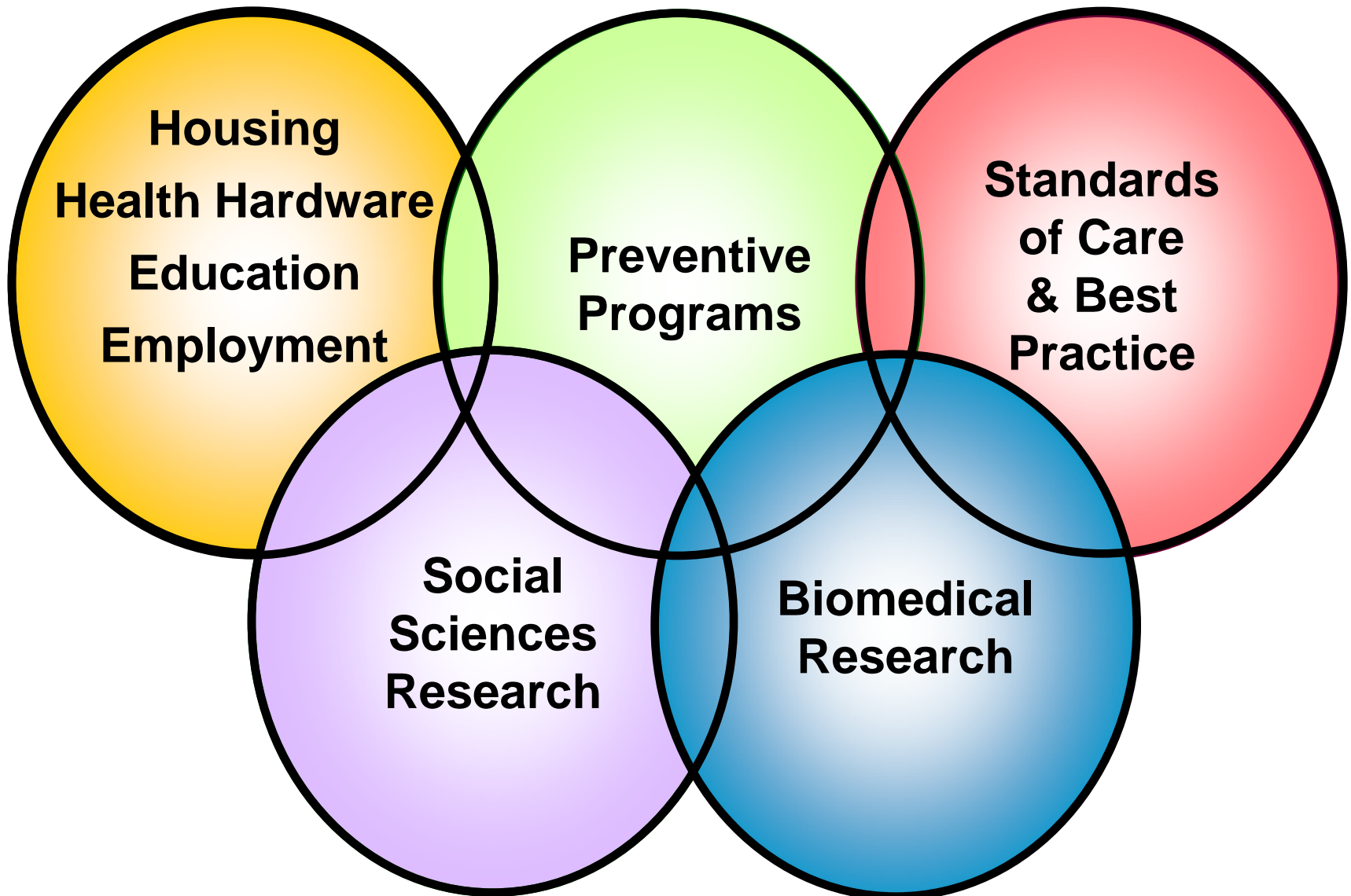
Global and Tropical Health Division, Menzies

Northern Territory Medical Program, Flinders & CDU

Socio-economic

Public Health

Clinical





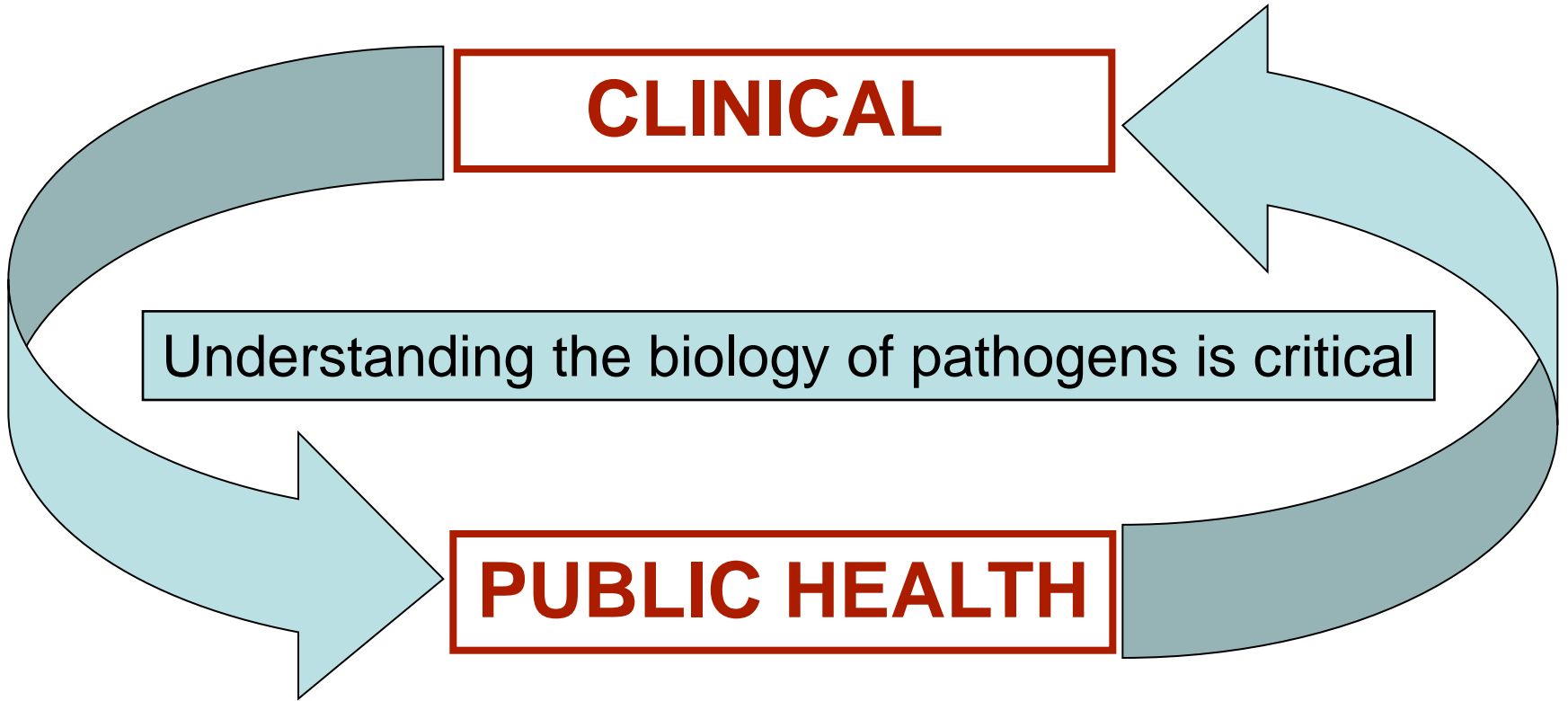
Infectious diseases are still important

CLINICAL

Understanding the biology of pathogens is critical

PUBLIC HEALTH

Understanding the sociology of families, communities, society and health staff and health services is critical



Pathogenesis of Acute Rheumatic Fever

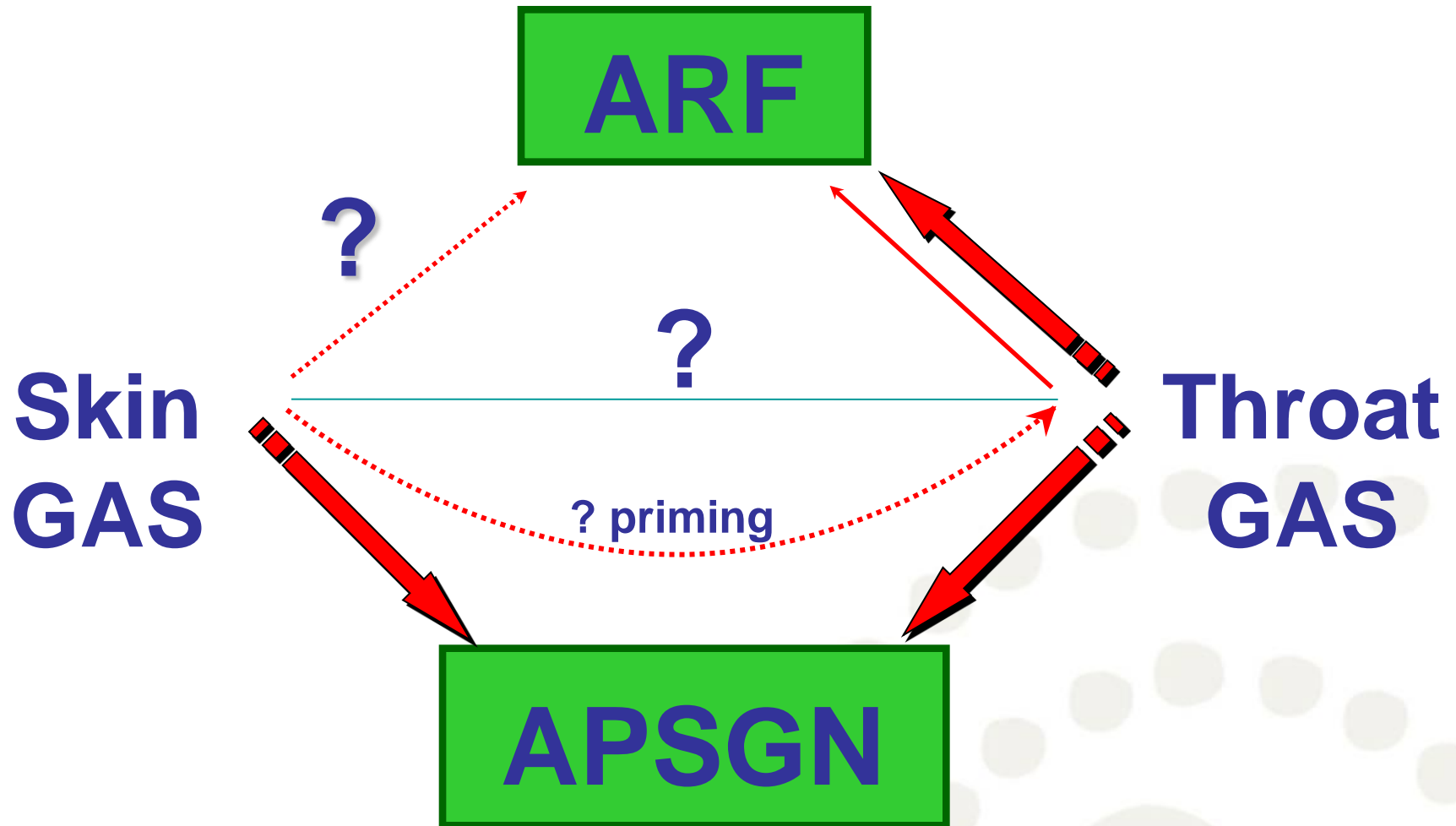
**Strep organism factor(s)
("Rheumatogenicity")**

**Host immune response factor(s)
(Genetic susceptibility)**



Abnormal immune response

Acute rheumatic fever



What we know we don't know

- Who are the “3-6%” susceptible?
 - what is the genetic basis of this?
- What is the immunopathogenetic process?
 - we need a diagnostic blood test for ARF
- Which Gp A strep *emm* types – how restricted?
 - what about GCS and GGS (horiz gene transfer)?
- What have skin GAS got to do with it?

Primordial prevention of ARF/RHD

- Housing
- Education
- Employment
- Communications
- Transport & access to services



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- How to make primordial prevention a reality?
- How to best choose when to Tx “throats and skin”?
- What is the PK/PD of benzathine penicillin?
- How do we optimise secondary prophylaxis?
 - dosing, intervals, adherence, pain, site, i-fat?

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Australian & Global Targets?

Key Performance Indicators for NT & Australia?

No child in Australia dying from complications of ARF/RHD

