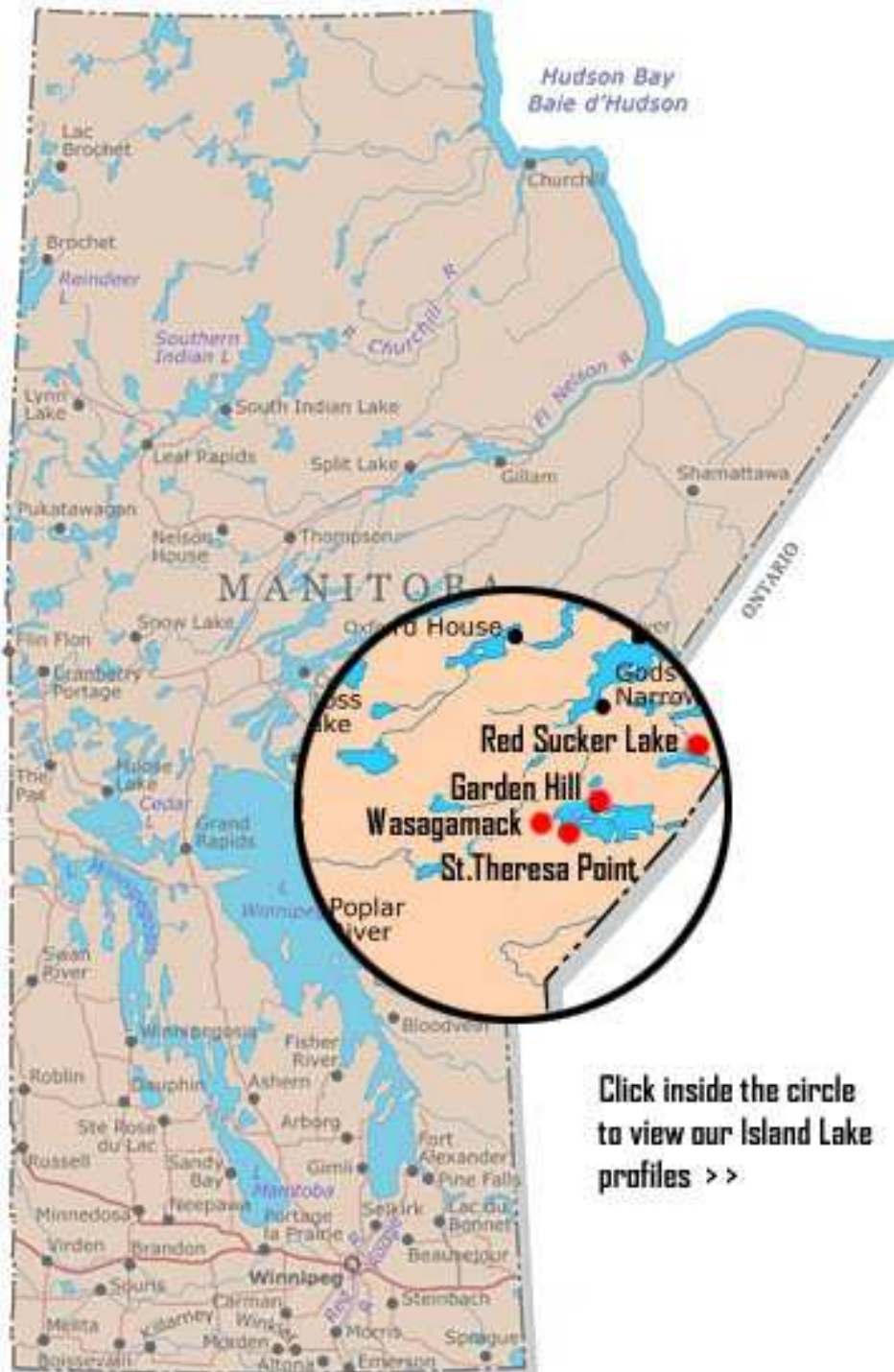


School Screening for Renal Disease in the Island Lake Area – a model of academic and community collaboration

Alex McDougall – Neewin

Malcolm Ogborn – Pediatric Nephrology,
Children's Hospital, Winnipeg



Click inside the circle
to view our Island Lake
profiles >>



The Island Lake Area Communities:

Garden Hill
St Theresa Point
Wasagamack
Red Sucker Lake
Population: 11,000
% 18 and under: 47

Cathy's story



At age 9, first episode of hematuria and proteinuria associated with febrile respiratory illness

Treated as a "UTI" at a nursing station; no culture, no further investigations no follow up.

6 more episodes managed the same way



Cathy's story



At age 13, presents to regional hospital with nausea and fatigue

Creatinine 580 $\mu\text{mol/l}$ Hb 90 gm/l Ca 1.8 mmol/l P04 2.6 mmol/l

Renal biopsy – endstage kidney due to IgA nephropathy

Failed peritoneal dialysis – family had to relocate for hemodialysis,

Many social and emotional upsets

Cadaveric renal transplant

Sudden death with a functioning graft due to suspected opportunistic pneumonia.



There is about a 75% chance this could have been avoided with early treatment

Excess renal disease in First Nations Children referred to Children's Hospital, Winnipeg, 1993



Congenital
Structural
Renal Anomalies

Odds ratio 6.5

Inflammatory
Renal Injury

Odds ratio 6.1

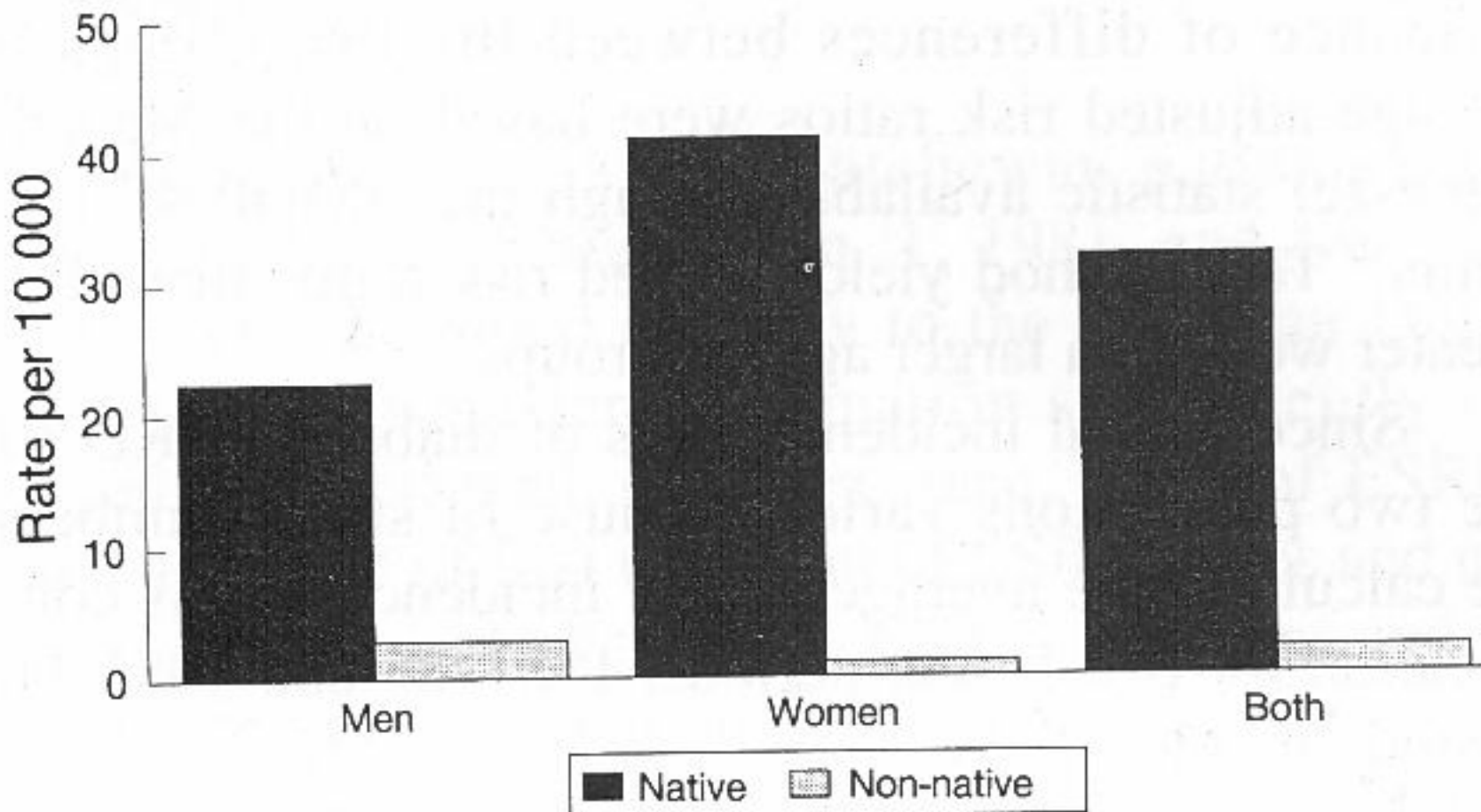
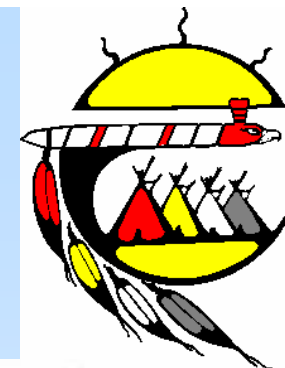
"Hostile environment"
Hypertension,
Diabetes Toxins

Bulloch et al; Pediatr Nephrol, 1996

Single gene inherited
Disorders
PKD, MCKD,
Cystinosis

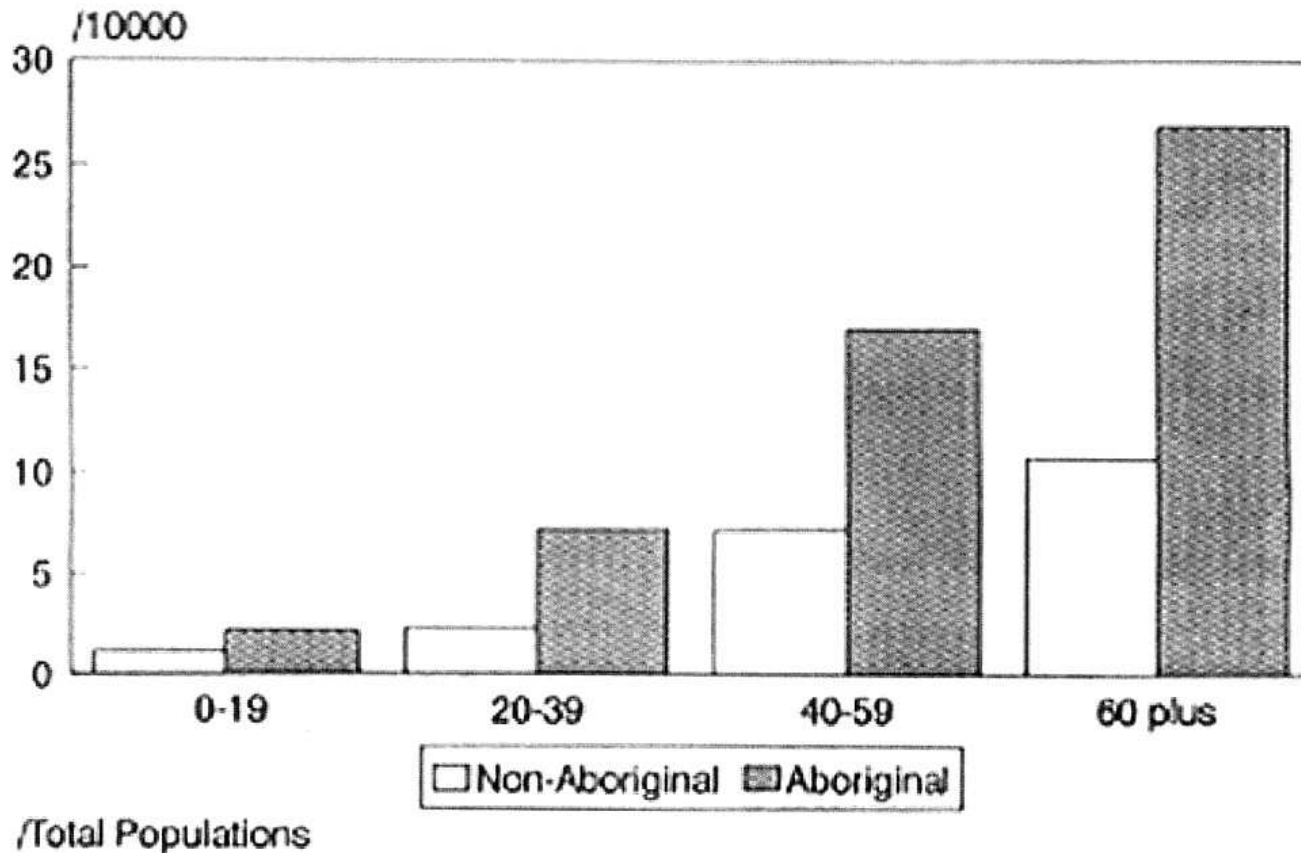
Odds ratio 0.9

Renal Failure in Aboriginal and Non-Aboriginal Diabetic People in Saskatchewan



Dyck, RF and Tan L, CMAJ, 1994

Non-Diabetic Renal Disease in Aboriginal and Non-Aboriginal People in Saskatchewan



Dyck, RF and Tan L, Clin Inv Med, 1998

Our working hypothesis



Excess renal failure in First Nations results from high rates of non-diabetic and potentially treatable renal disease, often starting in the young, later exacerbated by rising rates of type 2 diabetes

Our response



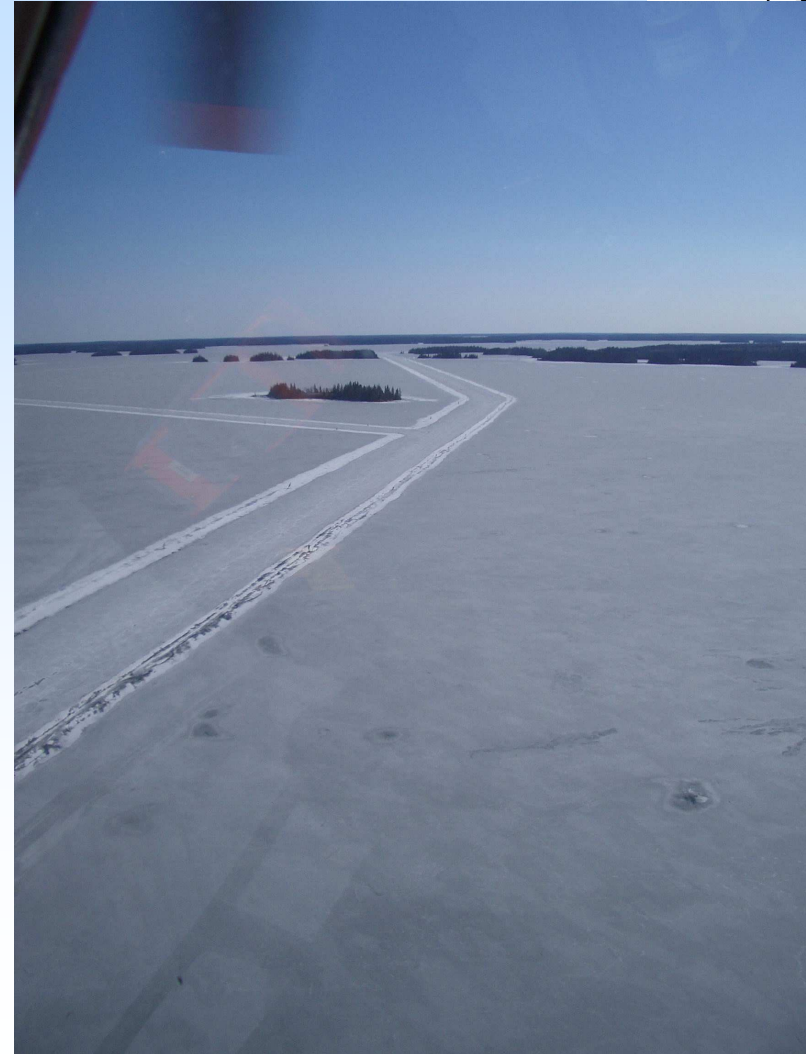
Several overtures to FNIHB from 1999 to 2003

Problems with staff turnover – never discussed this with same people twice

Disbelief – “native hematuria is due to snowmobiles and bumpy boat rides”

Inaction

2004-5 started dialogue with Neewin through U of Manitoba Northern Medical Unit



Neewin Health Care Inc.



**Memorandum of
Understanding
Incorporation
Board Composition
Mission Statement
Objectives
Island Lake Renal Health
Program
Primary Health Care
Centre**



Memorandum of Understanding

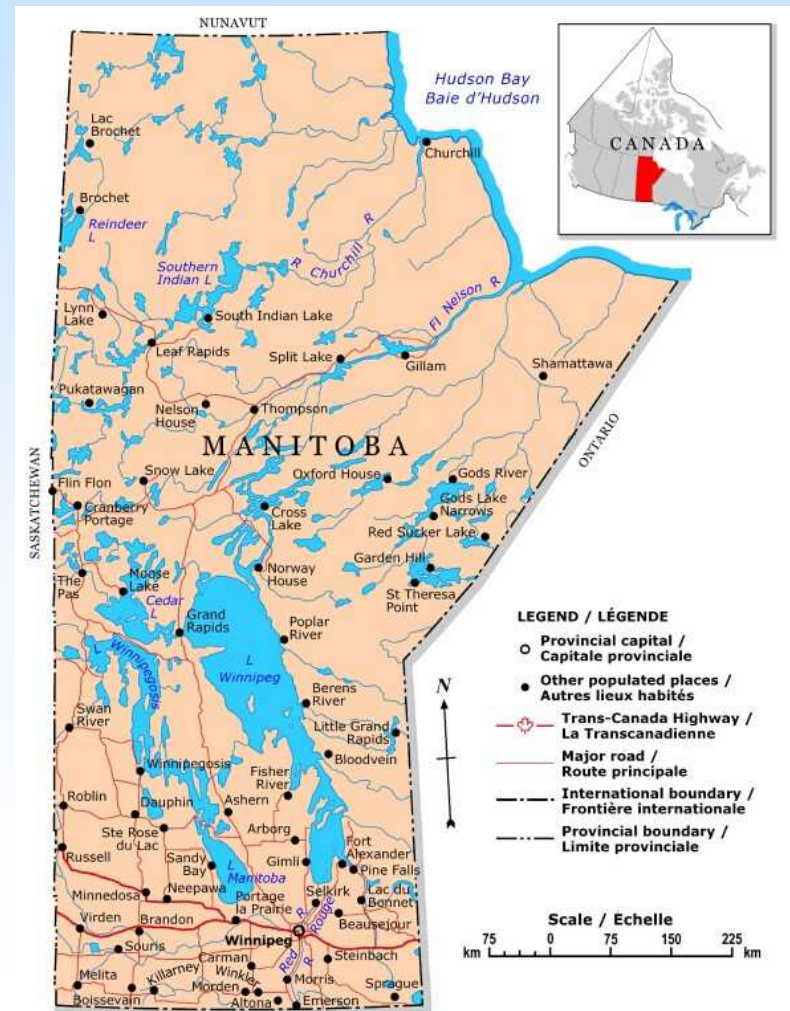


On April 13th, 2000, Island Lake Tribal Council, the two governments and Aboriginal and Northern Affairs met together.

MOU signed June 23rd, 2000 in Garden Hill by four Island Lake chiefs, Assistant Deputy Minister for Health Canada, and two Manitoba Cabinet Ministers.

Signatories to the MOU:

1. Garden Hill, St Theresa Point, Red Sucker Lake and Wasagamack
2. Government of Manitoba
3. Government of Canada



Incorporation

Prior to incorporation, the MOU established a Joint Health Governance Group (JHGWG)

Signatories to the MOU appointed delegates to make up the JHGWG

Island Lake Tribal Council Health Portfolio Chief, Garden Hill, St Theresa Point, Wasagamack, Red Sucker, FNIH, Manitoba Health, Aboriginal and Northern Affairs and the Northern Medical Unit



Mission Statement



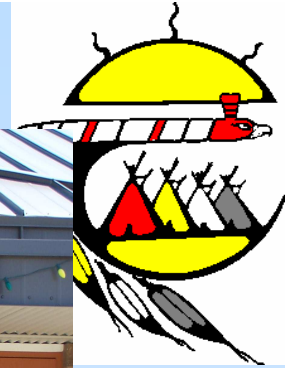
Strive to create and develop a model of Health Care that is culturally appropriate and is equivalent, if not higher in standard

Objectives



1. To work towards accomplishing the primary goals as identified in the Memorandum of Understanding signed by our respective governments: Island Lake First Nations, Health Canada and the Province of Manitoba in June 2000.
 - *To lead the negotiations process to result in the Board assuming governance responsibilities for the Island Lake Regional Renal Health Program*
 - *To manage the process to result in the creation of a Regional Primary Health Centre to be located next to the proposed land based airport on a road joining the communities of St Theresa Point First Nation and Wasagamack First Nation*
2. Ensure program and service sustainability by identifying and employing the most cost effective means

Island Lake Renal Health Program



Through a Tripartite agreement, program is managed by the Northern Medical Unit

Opened its doors for hemodialysis in January 2004

Successfully repatriated 16 patients and provided transient treatments to allow at least visits home

Pilot screening program in one community as part of health promotion/renal disease prevention mandate



Primary health care centre



A proposal has been developed to create a Primary Health Care Centre to Island Lake

Master Service Plan



What happened



Training visits for simple algorithmic approach to diagnosis of renal disease for nursing station staff in 2005.2006

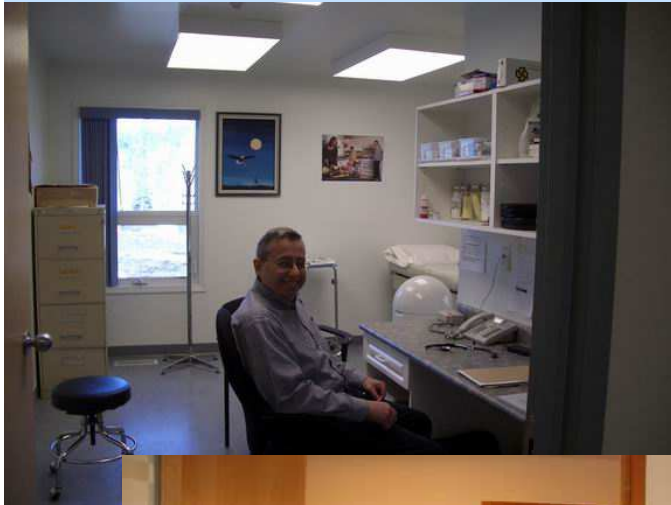
With support from Neewin, Island Lake Renal Health Program started screening in Garden Hill school in 2006

Initial screen examined 485 children for weight, height, acanthosis nigricans, blood pressure and urinalysis

Overweight:	48.2%
Acanthosis:	13.8%
BP >90%ile	27%
Hematuria	31%
Hematuria and Proteinuria	10.7%



Next phase



About 50 children at high risk being assessed on site by visiting Diabetes team, pediatric nephrologist or visiting pediatrician

Bloodwork, 24 hour ABP, OGTT (1 case) done on site prior to team visit

3 identified for further work up in Winnipeg - now pre-arranged prior to patient arrival

The Future

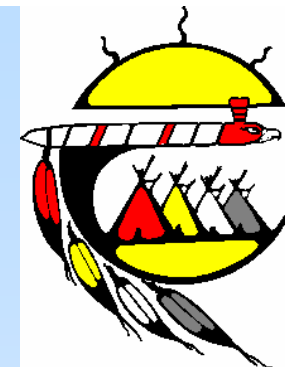


Direct engagement with the community who have ownership of the process is the way to go – different communities have needs and issues

Recognition that well looking children can be at risk still a challenge at both the community and system level

Best system to insure follow up is still a work in progress





But...the conversation has at least started

And...doing something has infinitely more chance of improving this situation than doing nothing

We're taking off!

