Enhancing Diabetes Care with First Nations Communities

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RADAR™
Reorganizing the Approach to Diabetes through the Application of Registries

How to Engage the FN Communities

- Has to be a partnership….
  - Commitment to authentic engagement
    - Stop talking and listen....
  - Shared respect, **trust**, accountablilty, and commitment to a **long-term relationship**
    - *"Researchers come in and do their 'thing' and leave and we are no better off than when they came in"*
  - Acknowledgement of the inherent rights of the FN
    - Once you take the time to understand things, it can make supporting care much easier
- **Goals**
  - Commitment to address the **priorities and needs of the FN communities**...outcomes have to be of **value to the FN communities...**

Identifying DM in First Nations Communities

- Screening or Identifying DM patients – RADAR Experience

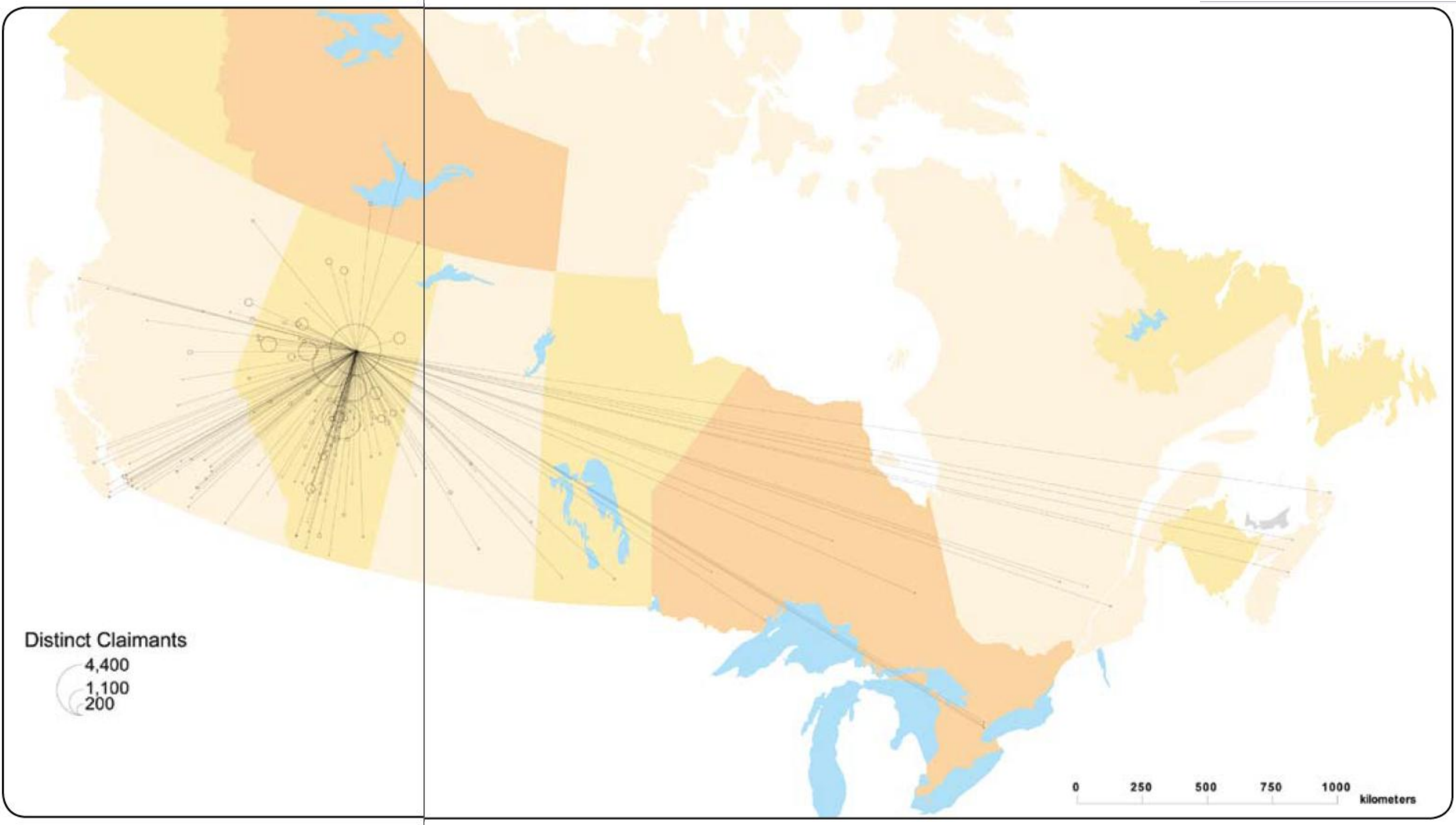
Largely patient driven

- Patient presents with initial S&S/complications to health centers
  - Patient referred to MD's
- Patient re-presents at health center
  - CHW rely on Netcare, EMR, NIHB sources and 'ticklers'
    - Lack of access, timeliness and accuracy of information,
- Patient attends screening days/events/health fairs (e.g. diabetes walks)

All of this problematic as we know

- FN patients might not access health care due to:
  - Historical trauma leading to mistrust of the health care system
  - Delay care, less likely to access care across the continuum from prevention, diagnosis and treatment.[1]
- No capacity for CHW to take on additional screening roles
- No resources (point of care, transportation); how to manage those newly diagnosed
- Geographic access (within and outside of the reserve)

1 – 2015 Truth and Reconciliation Commission of Canada


Distinct Claimants
4,400
1,100
200
0
250
500
750
1000
kilometers

Identifying DM in First Nations Communities

- Need to be More Proactive
  - Screen all adults with 1 or more risk factors presenting to the health system
  - Outreach (i.e. not home care) – need to find those not accessing healthcare
    - Identify high risk patients using current information systems (Netcare, EMR's, NIHB, AH)
    - Screening at ALL community events
      - Not just diabetes days/ walks but flu clinics, social gatherings in communities, etc.
  - "Culturally appropriate" education campaigns within communities on importance of screening
    - Community members and HCW

1 – 2015 Truth and Reconciliation Commission of Canada

Foundation – Information Systems

- Currently, few, if any, FN communities have the necessary infrastructure, expertise, or resources to employ the 5R's as part of a quality improvement strategy.
- Requires systems to support organized, proactive, multicomponent approach to healthcare delivery
- Step 1 - All communities need Netcare and EMRs
  - Need to ensure TRUST/PRIVACY in information sharing
    - Two-way information sharing within and outside of the communities
- Step 2 - Information systems must go beyond simple EMR's
  - Establish high quality, robust data systems
    - Ability to identify high risk patients
    - Track patients with diabetes
    - Share information seamlessly with the multiple care providers.
  - Establish measureable goals to identify and close gaps in health outcomes
    - Ability to remind HCQ to review and recall client's according to established quality of care processes

ACHORD
Alliance for Canadian Health Outcomes Research in Diabetes

RADAR™

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RADAR™

What is RADAR

- **Part 1**
  - Custom Integrated electronic patient registry and medical record system (CARE)
    - Not two stand alone system that ‘talk to each other’ but a truly integrated system
  - Enables identification, tracking, monitoring, and synthesis of medical information in standardized formats in real time
    - Alerts, reminders, suggestions for standards of care
    - Analysis of population data for epidemiological assessments, quality measures, and outcomes.
- **Part 2**
  - Care Coordinator
    - Located centrally and will provide remote assistance and guidance to improve diabetes care for FN on reserve
      - Idea of scalable infrastructure…..

Our Partners to Date:

Piikani

Saddle Lake

Bigstone Health

Cold Lake

Tsuut'ina Nation

Stoney First Nations

OKAKI

Strategic Clinical Networks
Highest quality of care and best outcomes.
SCN
Obesity, Diabetes and Nutrition

Alberta Innovates Health Solutions

The Lawson Foundation

University of Alberta

CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

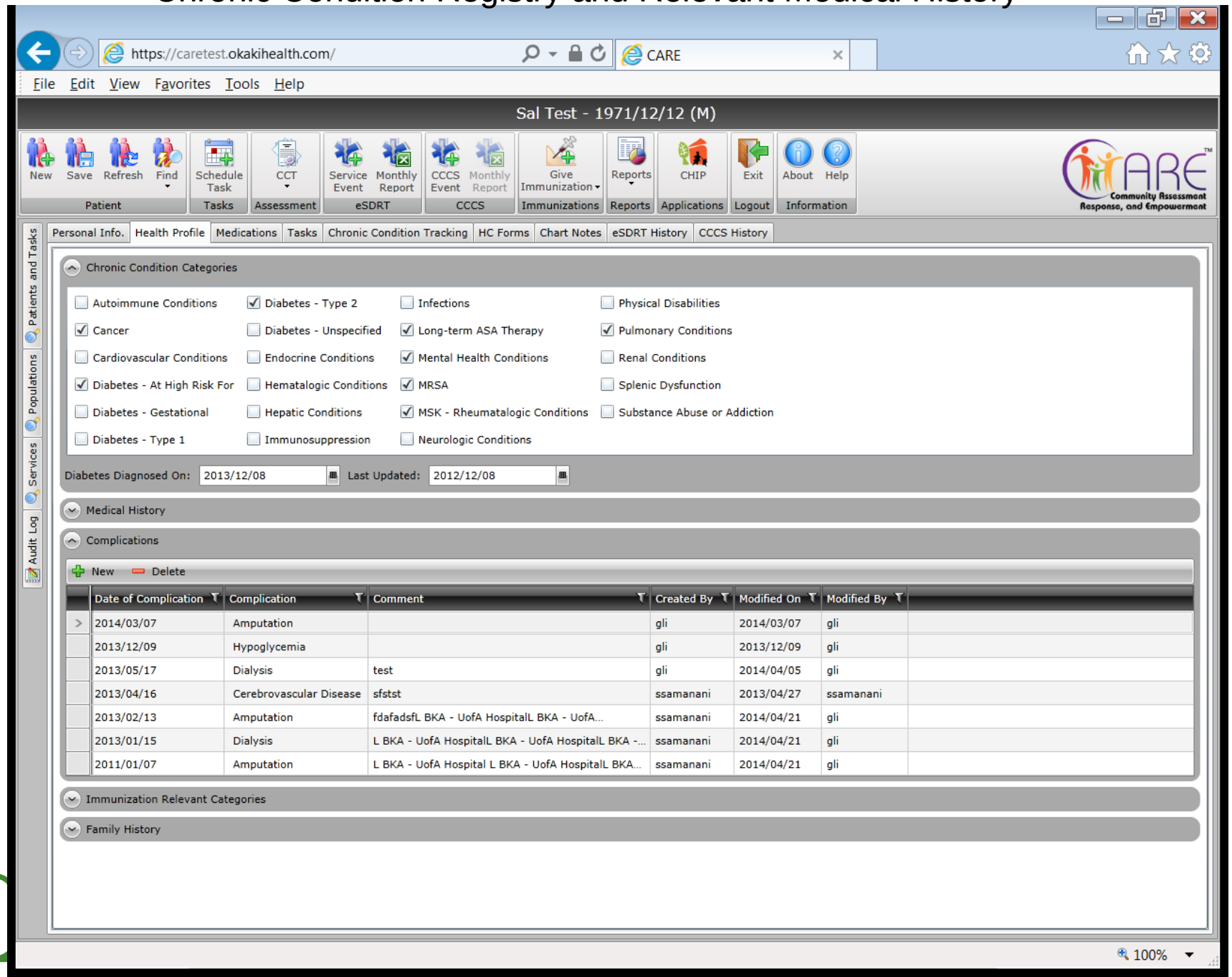
RADAP

Screen Shots from the Prototype Application
CARE to be Used in Project RADAR

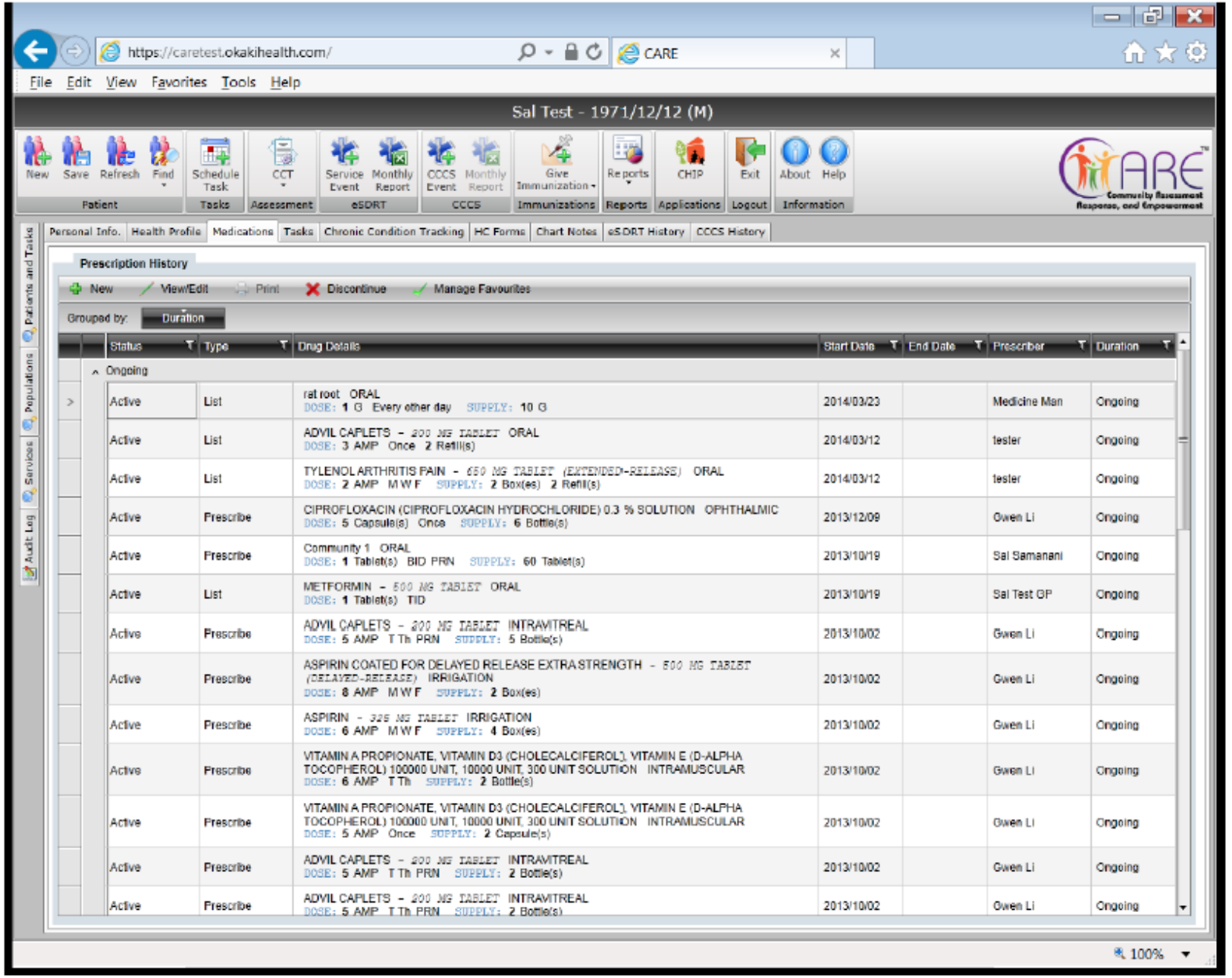
Reorganizing the **A**pproach to **D**iabetes through **A**pplication of **R**egistries

CARE™
Community Assessment
Response, and Empowerment

Chronic Condition Registry and Relevant Medical History

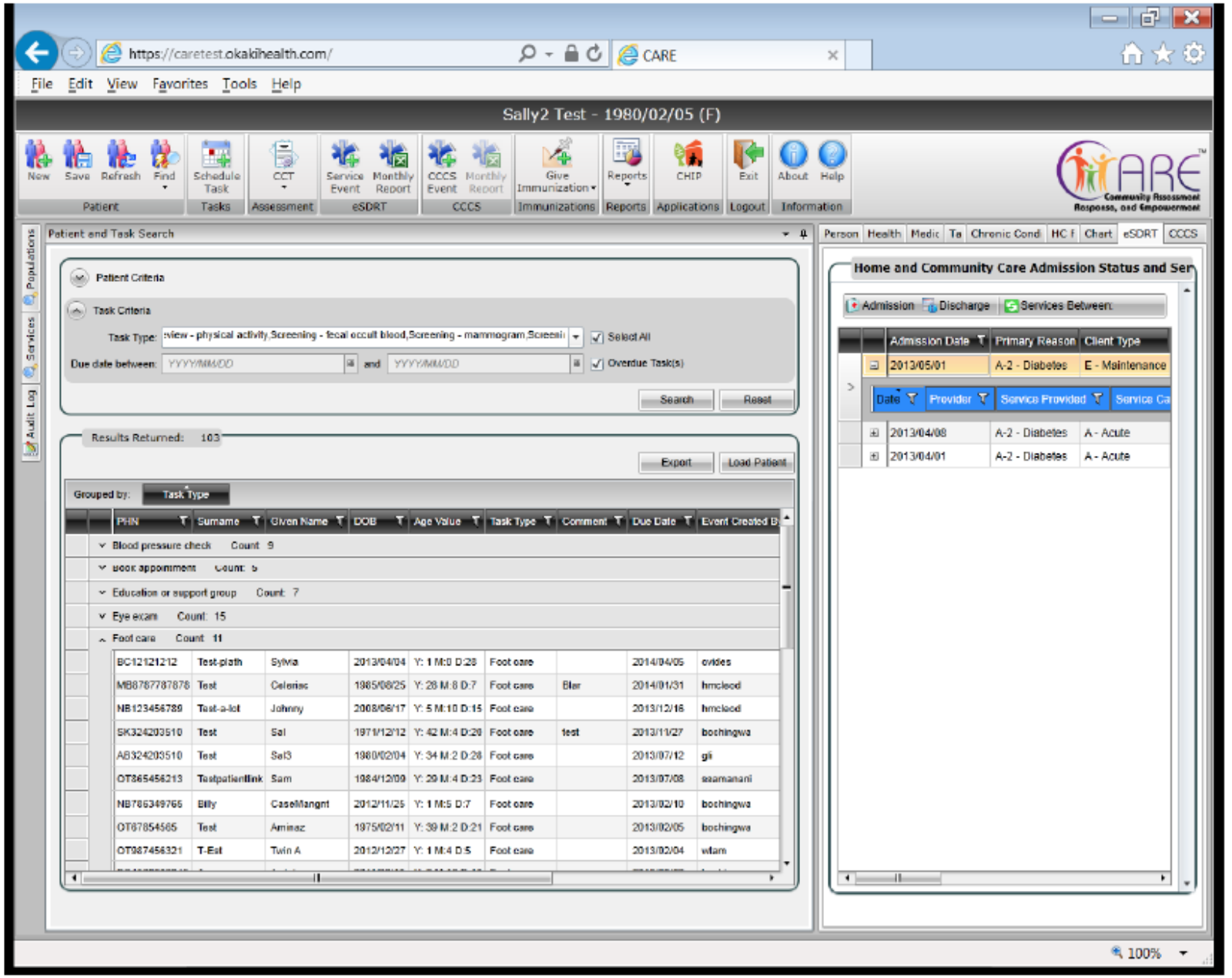


Medications

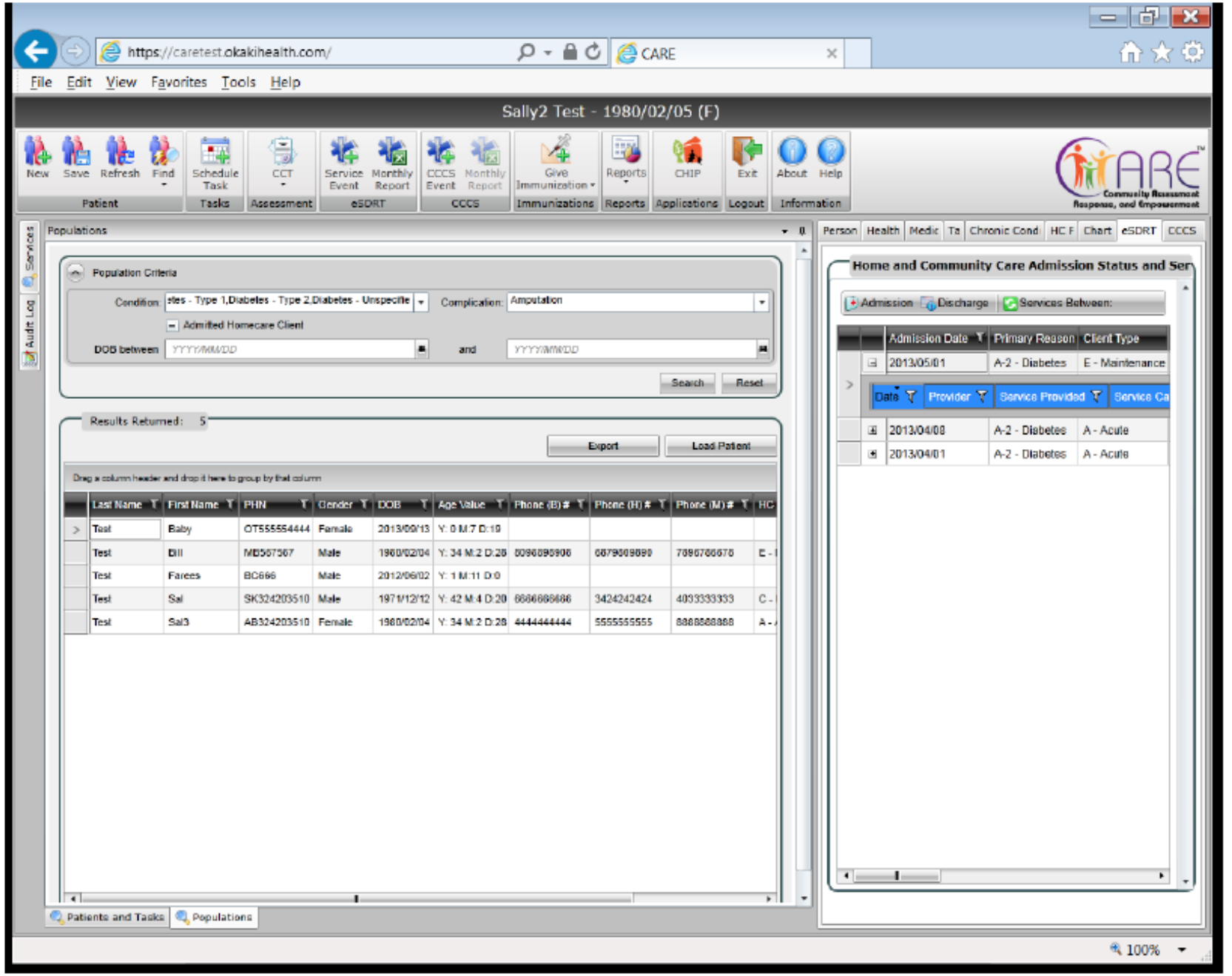


New Diabetes Foot Assessment

Past Due and Upcoming Tasks for Client Population



Chronic Condition Registry (e.g. All Diabetics with Amputation)



Early Results

Characteristics	Communities (n=409)
	Mean (SD) or n (%)
Age	59 (13) [range 20-90]
Sex - Male	63 (58)
BMI	34.5 (8.8) (33% only have data) -

Processes of care	Communities (n=409)	
	Mean (SD) or n (%)	Percent (%) without assessment
A1c	8.0 (2.2)	5
SBP	118 (18)	81
DBP	66 (10)	81
LDL	2.11 (0.95)	21
HDL	1.03 (0.27)	15
eGFR	102 (25)	19
ACR - Normal - Microalbuminurea - Overt Nephro	209 (51) 109 (52) 67 (32) 33 (16)	49

Baseline

Processes of care	Communities (n=409)	
	Mean (SD) or n (%)	Percent (%) without assessment
Eye Examination	164 (40)	60
Foot Examination	119 (29)	71
Influenza Vaccine	217 (53)	47
CC Tasks (Referrals, Labs, Counselling, Education, etc.)		~600 completed to date; 125 foot care referrals; 75 retinal referrals, 200 labs ordered

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RADAP ™

Implementation of RADAR - Success and Challenges

Challenges

- A lot of effort to get communities off the ground!
  - Technology, health care providers are uncomfortable with using the CARE program.
  - Transition from paper charts to EMR use
- New role for nurse and CC ...more reliance on CC to prioritize care in the community; CC does not provide front line patient care.
- Coordination is difficult - personal/ community events: sick, vacation, death in community, etc.
- Adjusting to Staff Turnover
  - 4 Health Directors; 6 Head Nurses; and numerous other support staff....

Successes

- All now on EMR
- All have access to Netcare for First Nation communities – Would not have happened with RADAR
- Health Care directors who are now committed to improve DM care for their communities.
  - Identification/resources to assign a Designated Diabetes Nurse in the communities
- Relationship created/ strengthened with MD and PCNs in nearby community to provide optimal care to patients