Case Management: Practicing Population Health to Engage Patients as Partners in Care

1/28/2026

Indian Health Service
CSU Population Health Department,
Diabetes Program

Chinle Service Unit

Chinle Comprehensive Healthcare Facility

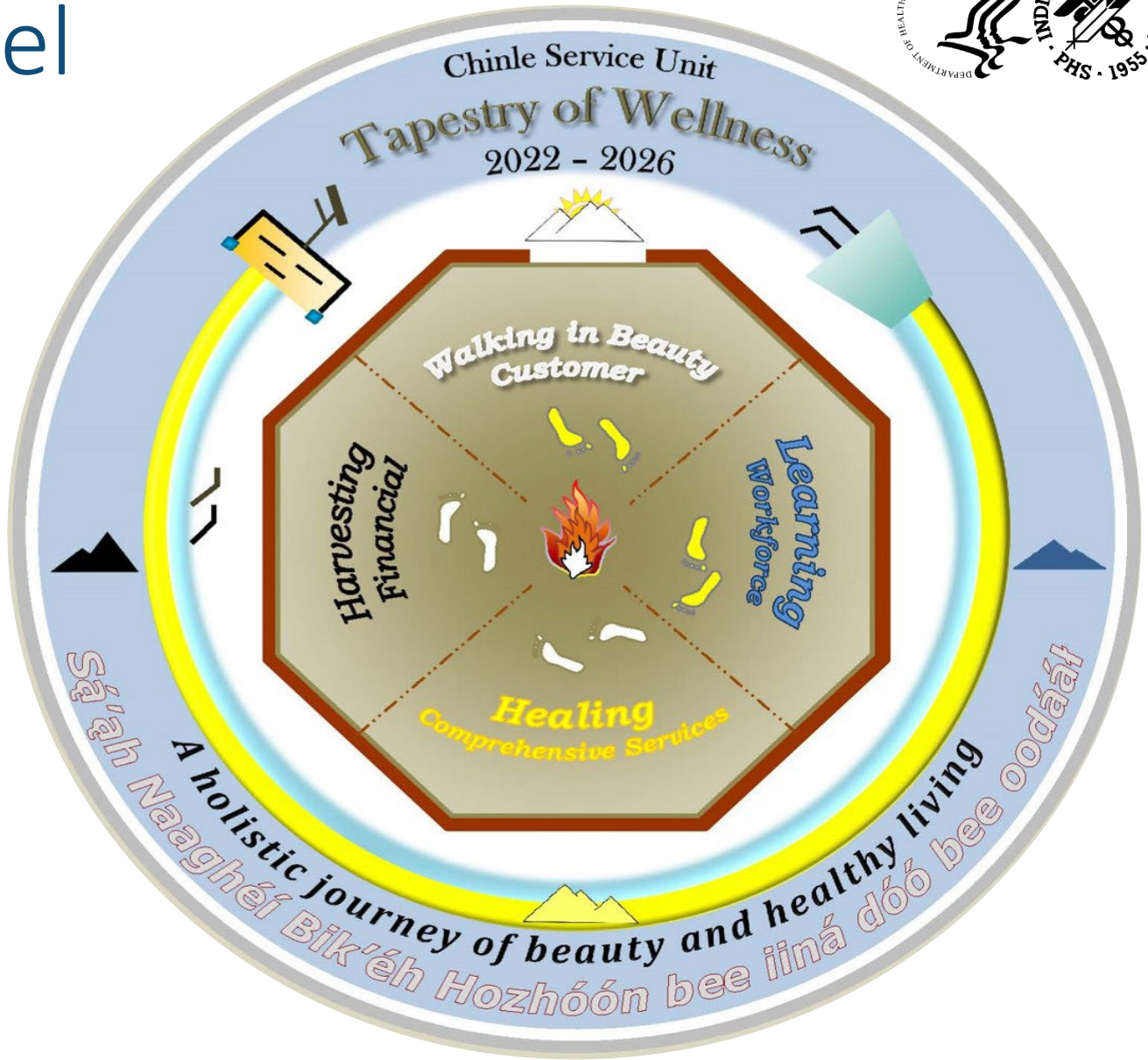
Pinon Health Center

Tsaile Health Center

How do we provide high quality, patient-centered primary care for people with a diagnosis of diabetes?

Navajo Wellness Model

Photo: Navajo Hogan;
taken by Delilah Browne, MPH



Who We Are

- Diabetes Program across the Chinle Service Unit
  - 1 administrator
  - 3 coordinators (1 vacancy)
  - 1 data manager
  - 1 administrative secretary
  - 1/2 clinical consultant (vacancy)
  - 1 nurse improvement specialist
  - 1 lead health coach/public health advisor
  - 10 health coaches

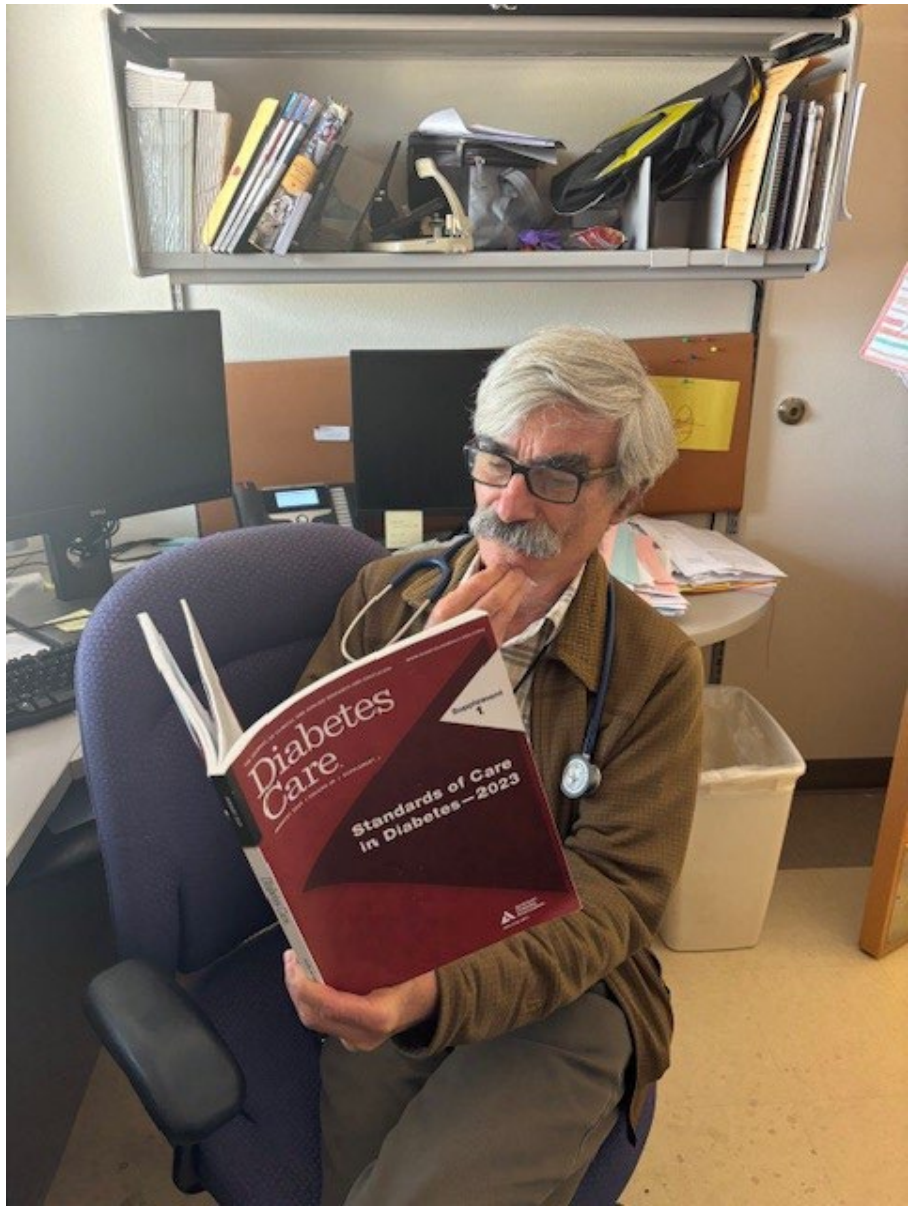
Collaboration

- Collaboration within the Chinle Service Unit (CSU) for diabetes clinical care and prevention
  - Primary care (adult, pediatrics, special care obstetrics, case management), podiatry, optometry, dental, nutrition, pharmacy, integrated behavioral health, in-patient, Office of Native Medicine, mobile health unit, adolescent/school health, Wellness Center, HPDP, public health nursing
- Community partnerships
  - Schools, Chinle Navajo Nation Special Diabetes Program for Indians (SDPI), Navajo Nation Health Education, Community Health Representatives

Objectives

- Differentiate case management and health coaching and examine how case management programs may improve patient-centered clinical services, primary care infrastructure, and population health.
- Apply mentoring strategies that support healthcare team members in developing core case management skills.
- Utilize clinical data tools such as RPMS, ICare, and Audit analytics to identify high-risk patients with a diagnosis of diabetes within a population.

We used to rely on the primary care provider's diabetes care knowledge and skills



Personal photo

We now understand that teams of health care professionals can do better!

Personal photo

Whole Person Care

MORE THAN ADDRESSING
“WHAT IS THE MATTER WITH YOU?”

ALSO, ADDRESSES
”WHAT MATTERS TO YOU?”

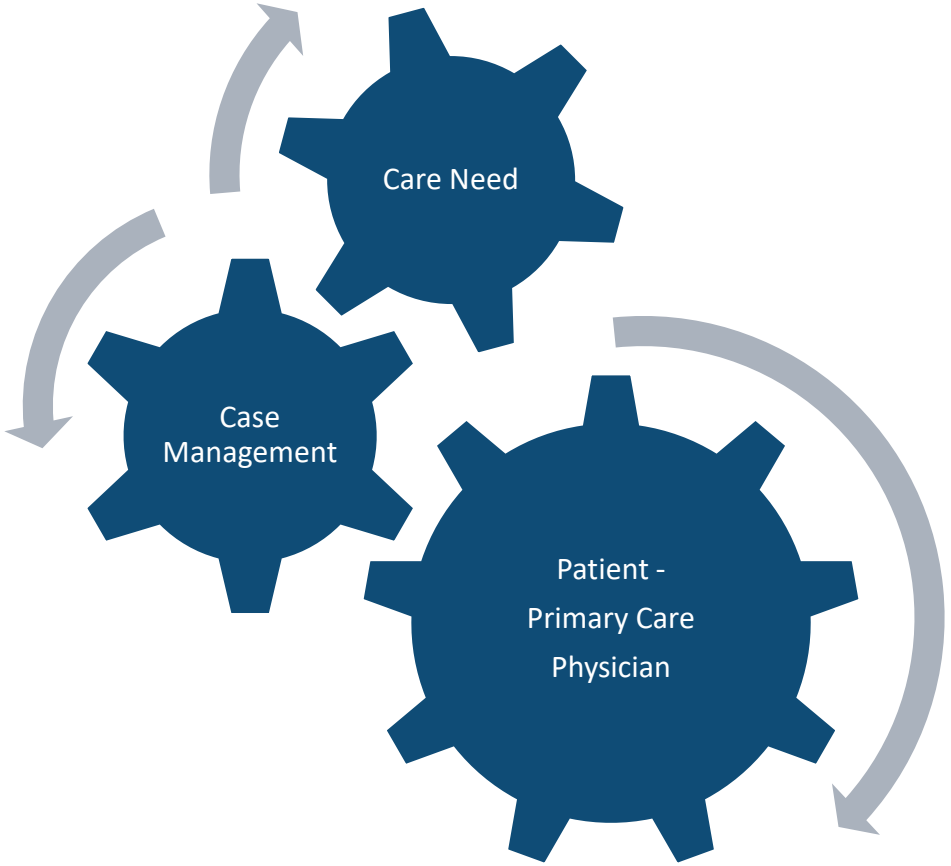
What is high quality primary care?

- High-quality primary care is
  - The provision of whole-person, integrated, accessible and equitable health care
  - By interprofessional teams who are accountable for addressing most of an individual's health and wellness needs across settings and
  - Through sustained relationships with patients, families, and communities.

National Academies of Sciences, Engineering, and Medicine 2021. Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care.

Case Management

- Philosophy
  - Case managers triangulate between patients/caregivers, providers, and the organization of health services to maximize benefits
    - Explicit advocacy (and equity) role for patients/caregivers within the health system
    - Knowledge of how the health system works and how it might best serve a patient and their needs
  - Bridge communication between patients and provider(s)



What Is A Case Manager | Case Management Society of America (cmsa.org)

What is health coaching?

- Health coaching helps patients build the knowledge, skills, and confidence required to manage their chronic conditions and improve their health
- Health coaches empower patients to play a central role in clinical encounters and to engage in self-management activities at home, work, and school, where they spend most of their time
- Health coaching philosophy
  - Built on a relationship
  - Helps patients understand provider advice
  - Empowers patients to be involved in clinical decisions
  - Meets patients where they are whether the patient is ready for changes

https://cepc.ucsf.edu/health-coaching

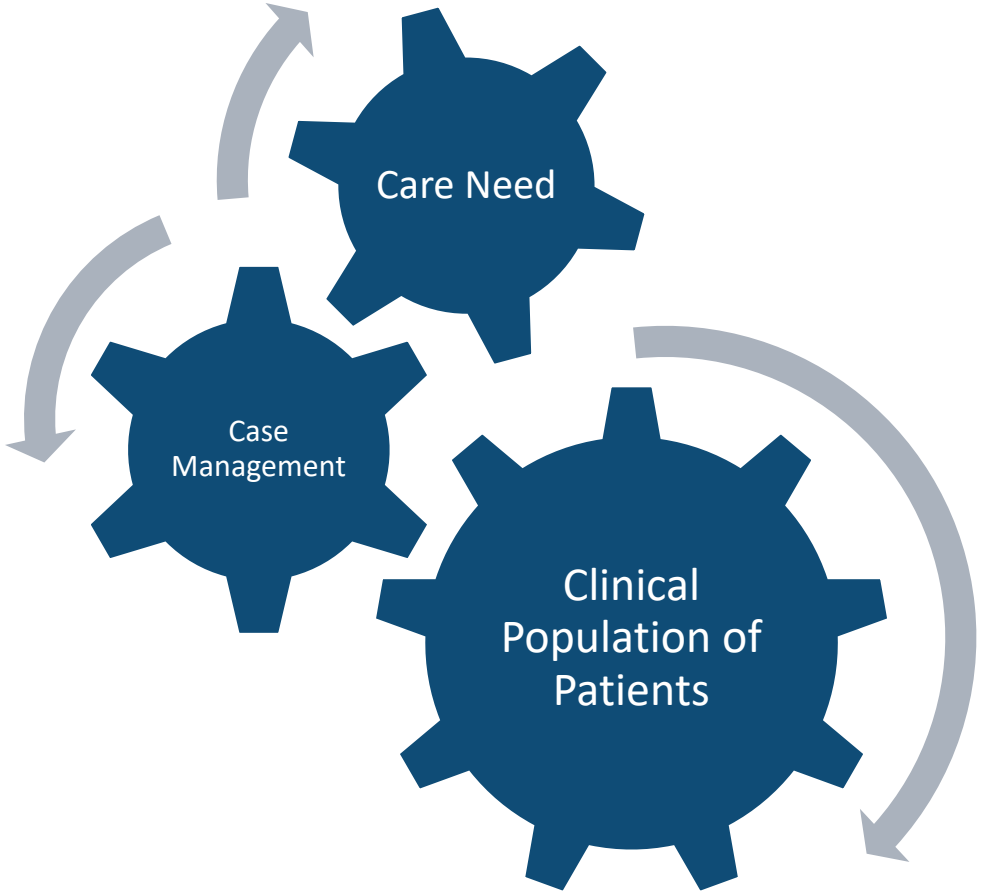
Who are our health coaches?

- Local community members
  - Preferably Navajo speaking
- Employment history or schooling related to health, nutrition, physical activity, health promotion, and/or behavior change
- GS level for a health coach is a ladder position 5, 6, 7
  - Skills and knowledge determine GS level

Personal photo

Population Health

- Population health is defined as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.”
- “The Chronic Care Model has helped moved the culture in health care from reacting to the acute care needs of patients to a pro-active reorganization of health care delivery around the needs of populations.”



Lewis, N. Populations, Population Health, and the Evolution of Population Management: Making Sense of the Terminology in US Health Care Today. Institute for Healthcare Improvement. https://www.ihi.org/library/blog/populations-population-health-and-evolution-population-management-making-sense-terminology. Published September 5, 2023.

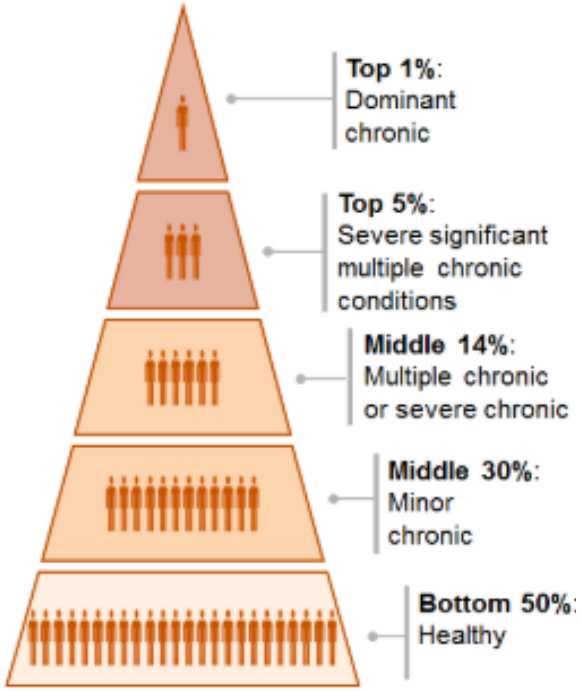
Disparities in Social Determinants of Health

SDoH Measure	Navajo Nation	US
Access to safe drinking water	70%~	97%~~
Access to electricity	68%`	100%``
Employment rate%	37%	61%
Median household income%	$33,592	$77,719
Health Care Coverage%	83%	92%
Households without a computer**	41%	7%
Bachelor's degree or higher%	10%	36%

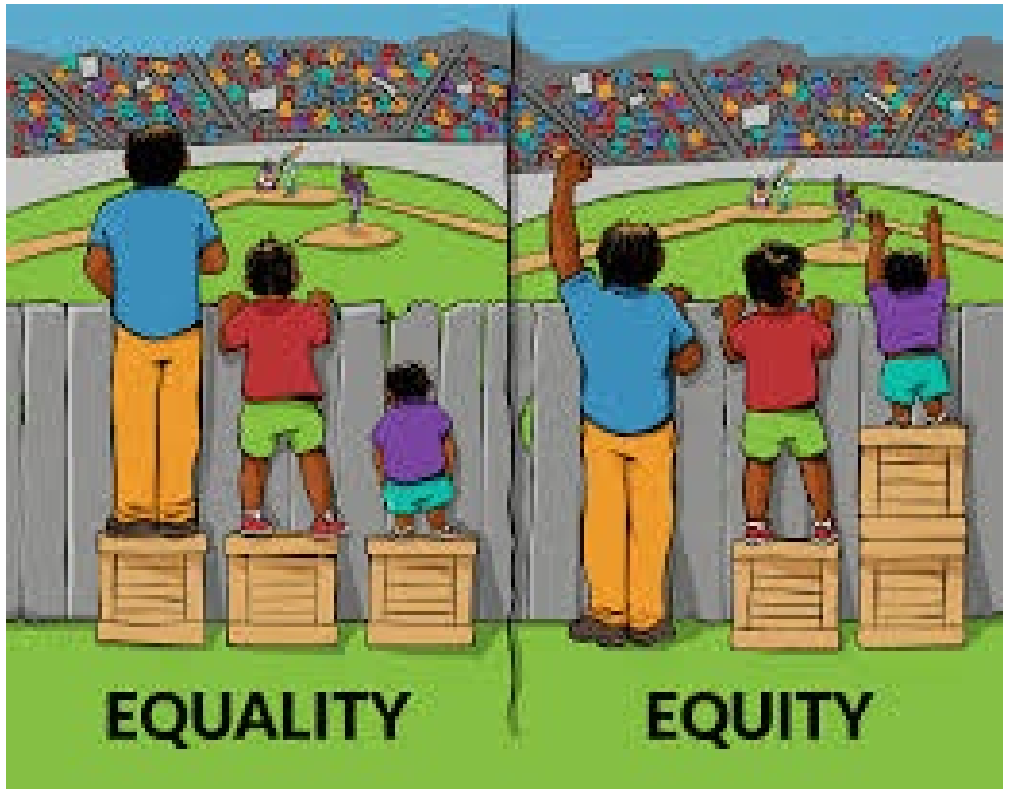
Photo: Navajo Home Address—5.5 miles north of the Chinle Bashas', beige house with a brown roof; taken by Farrah Begay HC

~https://www.navajowaterproject.org/
~~https://data.worldbank.org/indicator/SH.H2O.SMDW.ZS
`https://apnews.com/article/navajo-nation-electricity-tribal-lands-reservation-infrastructure-poverty-76f4515d3211a31cdff503c6082e3590
`` https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS
**https://naair.arizona.edu/sites/default/files/Navajo%20Nation%20Census%20Data_0.pdf
%https://data.census.gov/profile/Navajo_Nation_Reservation_and_Off-Reservation_Trust_Land,_AZ--NM--UT?g=2500000US2430

Equitable Care



http://radar.oreilly.com/2013/08/the-next-top-5-identifying-patients-for-additional-care-through-micro-segmentation-2.html



https://resistancetraining.wordpress.com/2016/06/28/the-equity-kids/

Team Based Care

Courtesy of the Medical Center Archives of New York Presbyterian/Weill Cornell Medicine

Team Based Care

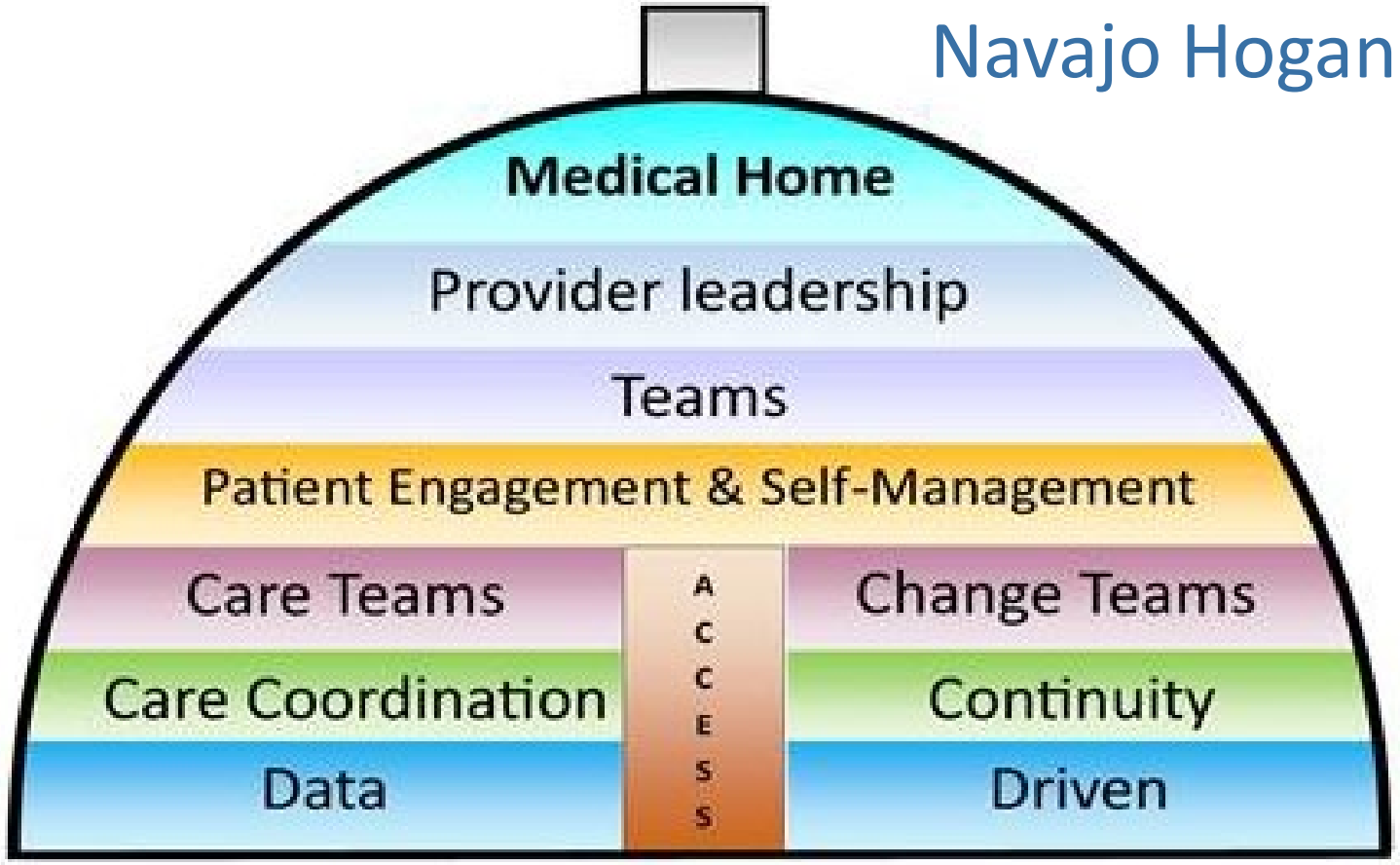
Courtesy of the Medical Center Archives of NewYorkPresbyterian/Weill Cornell Medicine

THE VISION of relation-based care: "This care is different."

- How we hope patients talk about their experience
  - There is a team helping me and they all seem to know what they're doing
  - They care about me and what I want
  - They are easy to get a hold of
  - My appointments are better – things really get done
  - They've taught me so that I can now really take care of myself
  - They helped me get through one of the hardest periods of my life
  - I am on more meds but I understand them better
  - They listen
  - I feel better

Medical Home Model: Primary care based

Navajo Hogan



http://www.foma.org/patient-centered-medical-home.html

Medical Home Model: Primary care based

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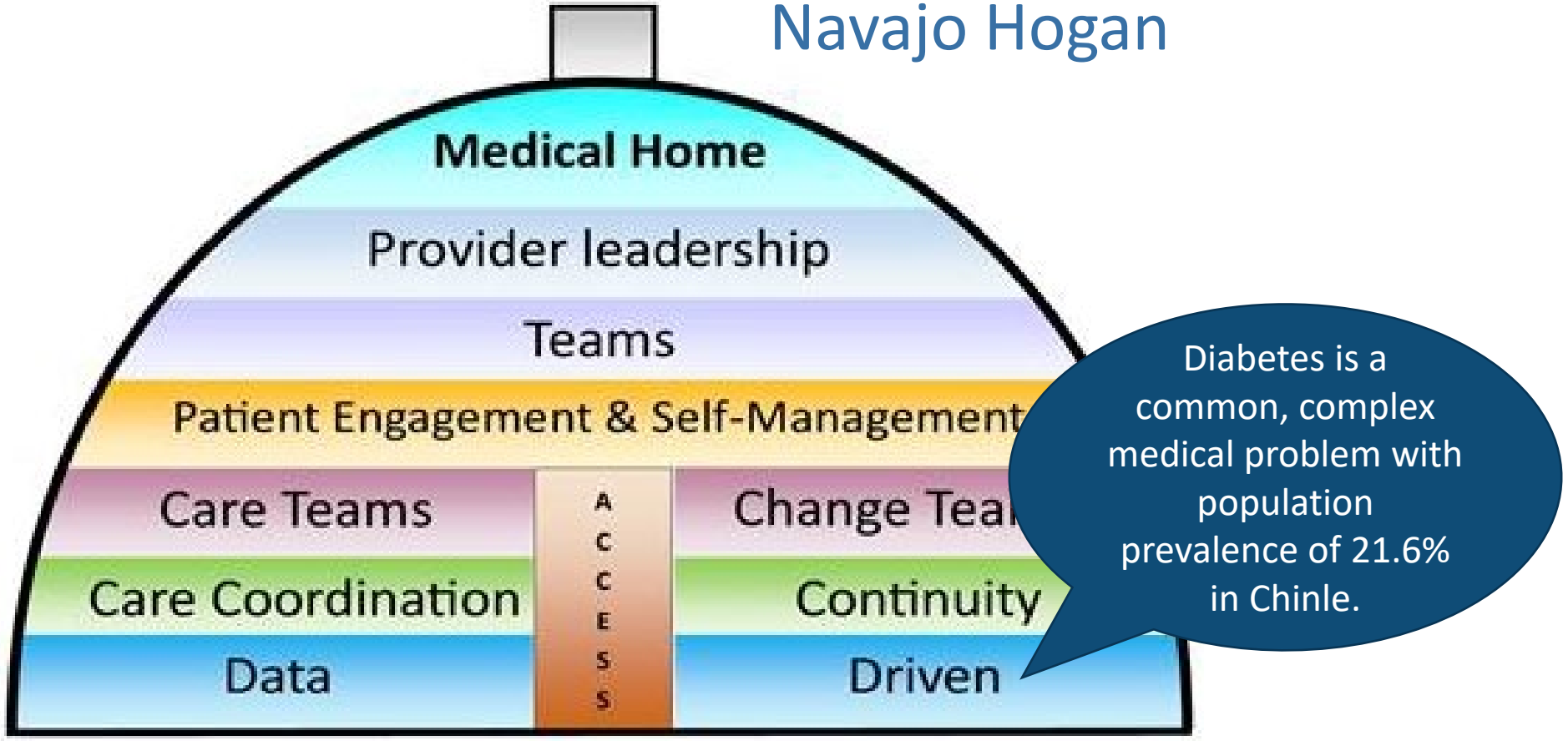

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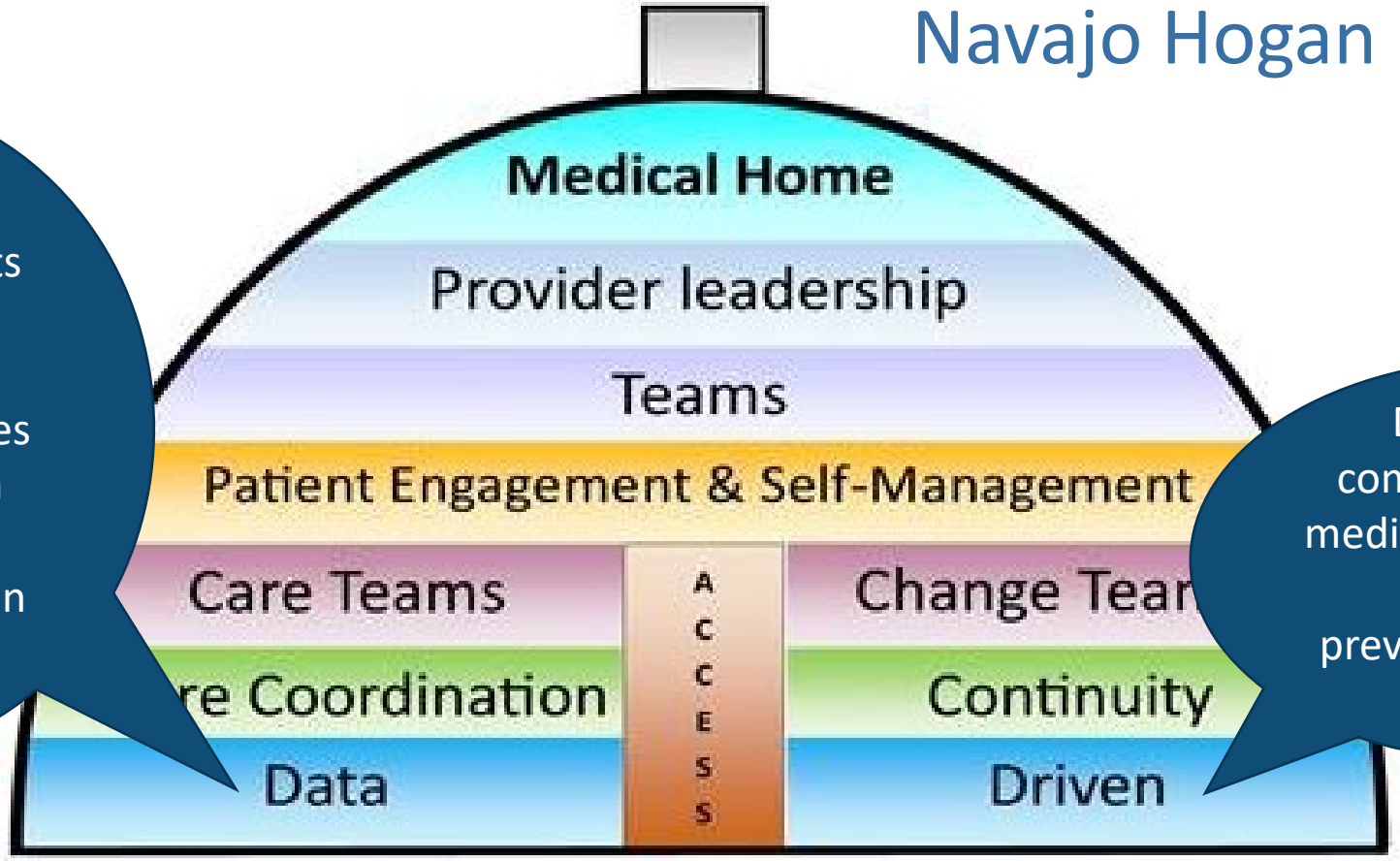
Medical Home Model: Primary care based

Navajo Hogan

We can identify cohorts of patients who will benefit from special attention. Examples are patients with new onset DM, elevated A1c, or on insulin.



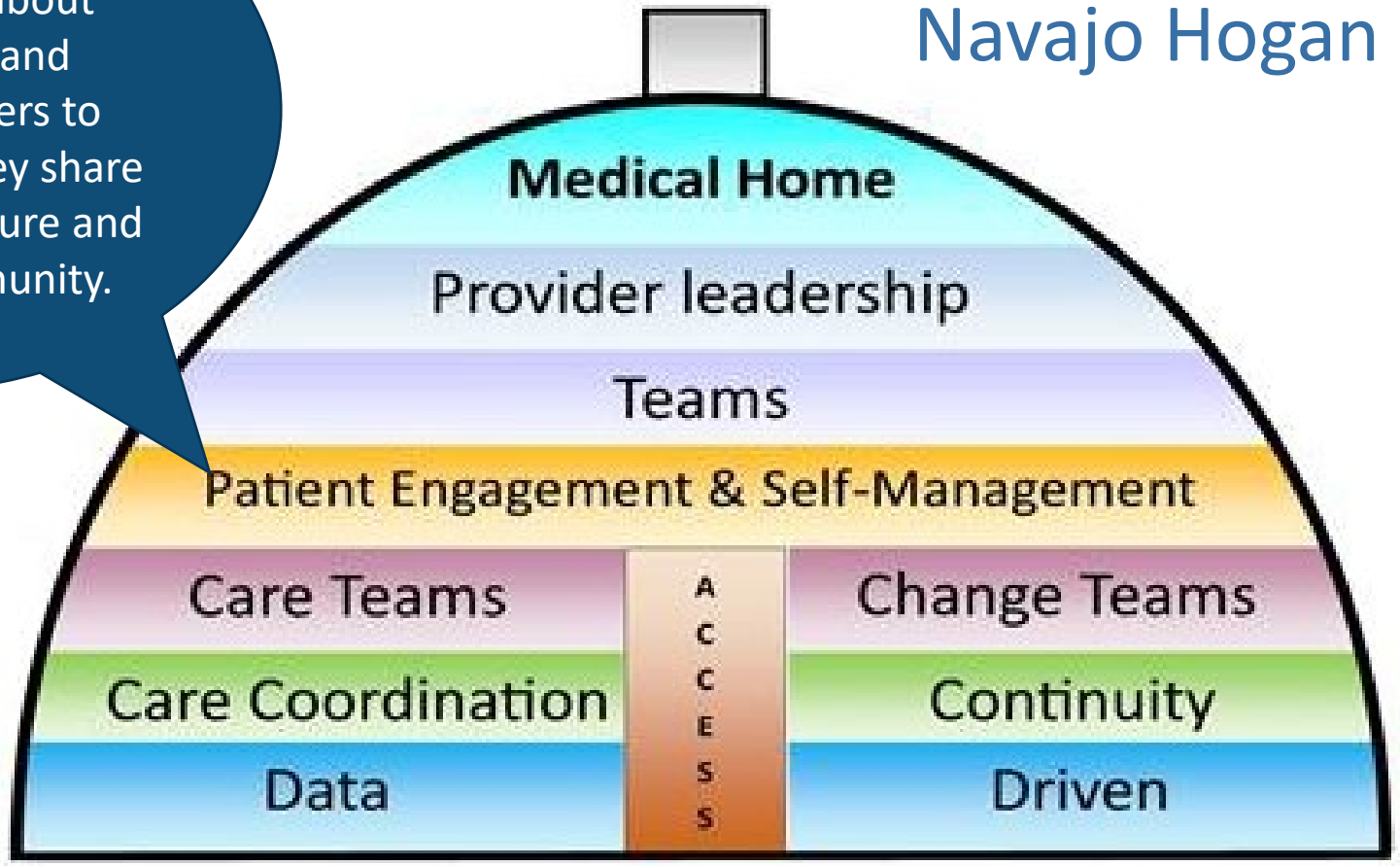
Diabetes is a common, complex medical problem with population prevalence of 21.6% in Chinle.

http://www.foma.org/patient-centered-medical-home.html

Medical Home Model: Primary care based

Health coaches can help patients learn about diabetes care and overcome barriers to diabetes care. They share language and culture and live in the community.

Navajo Hogan

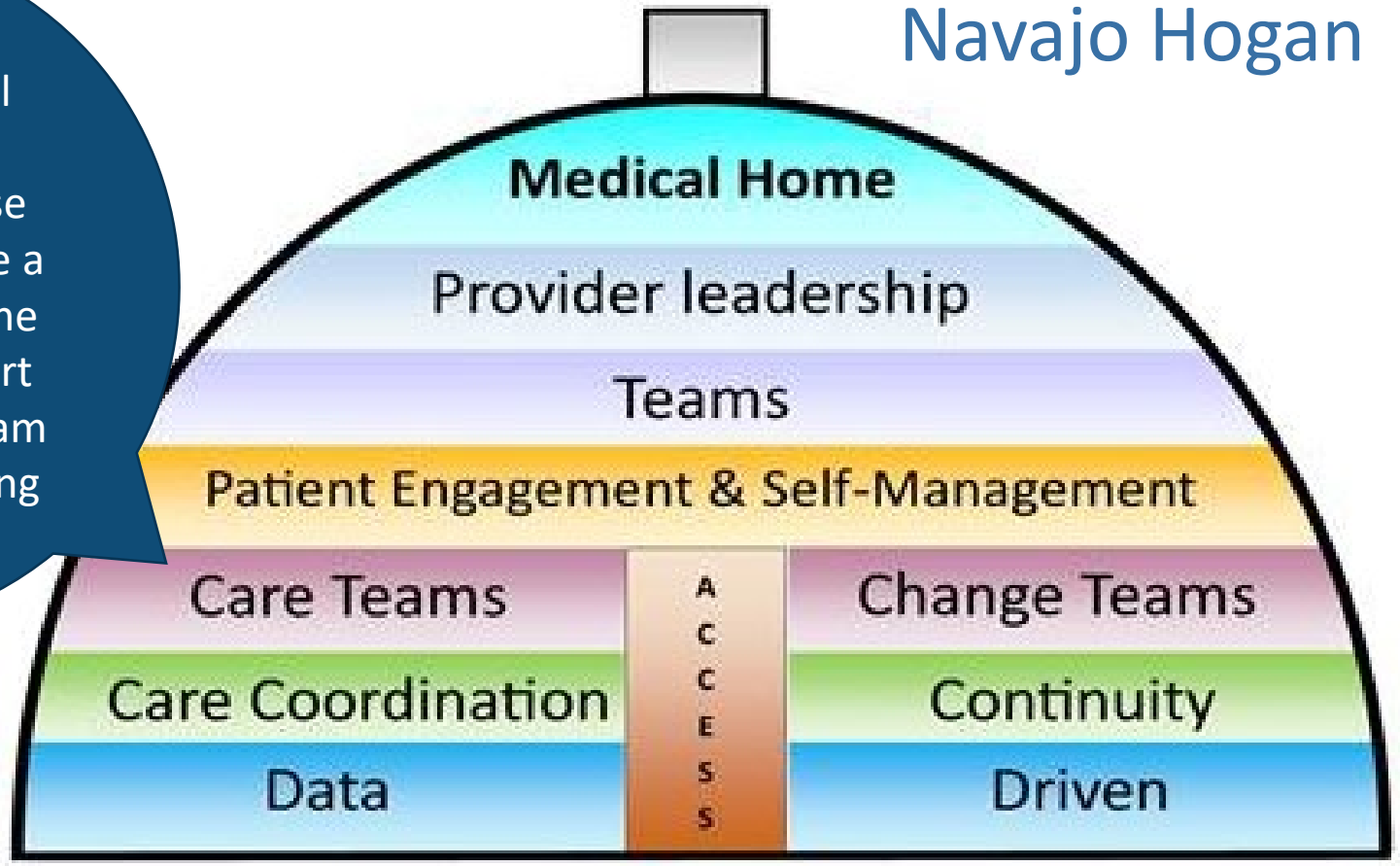


http://www.foma.org/patient-centered-medical-home.html

Medical Home Model: Primary care based

Health coaches, providers, medical assistants, care coordinators in case management create a care team. This is the basic unit of support for patients. The team may grow, depending on the patient.

Navajo Hogan



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Medical Home Model: Primary care based

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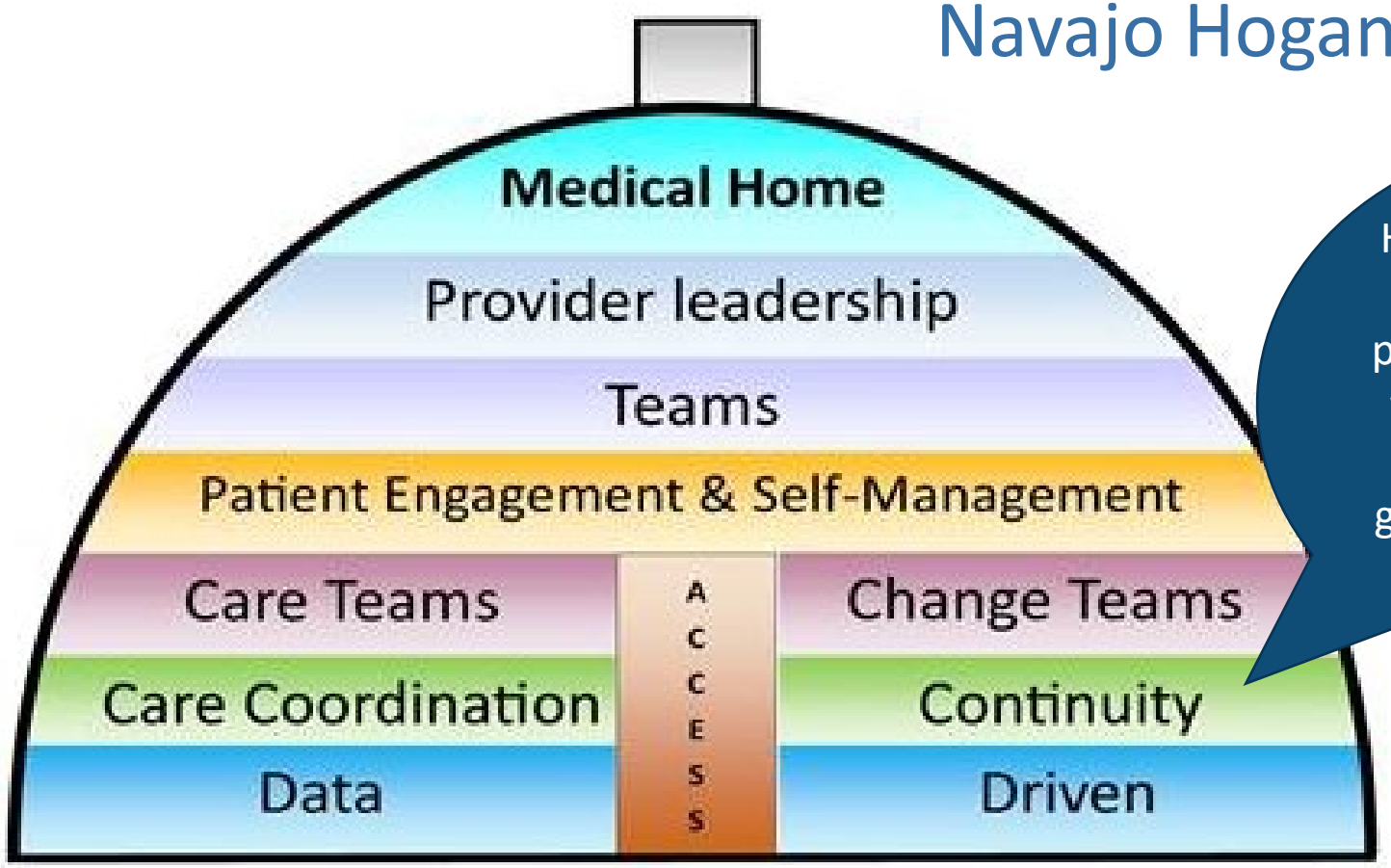
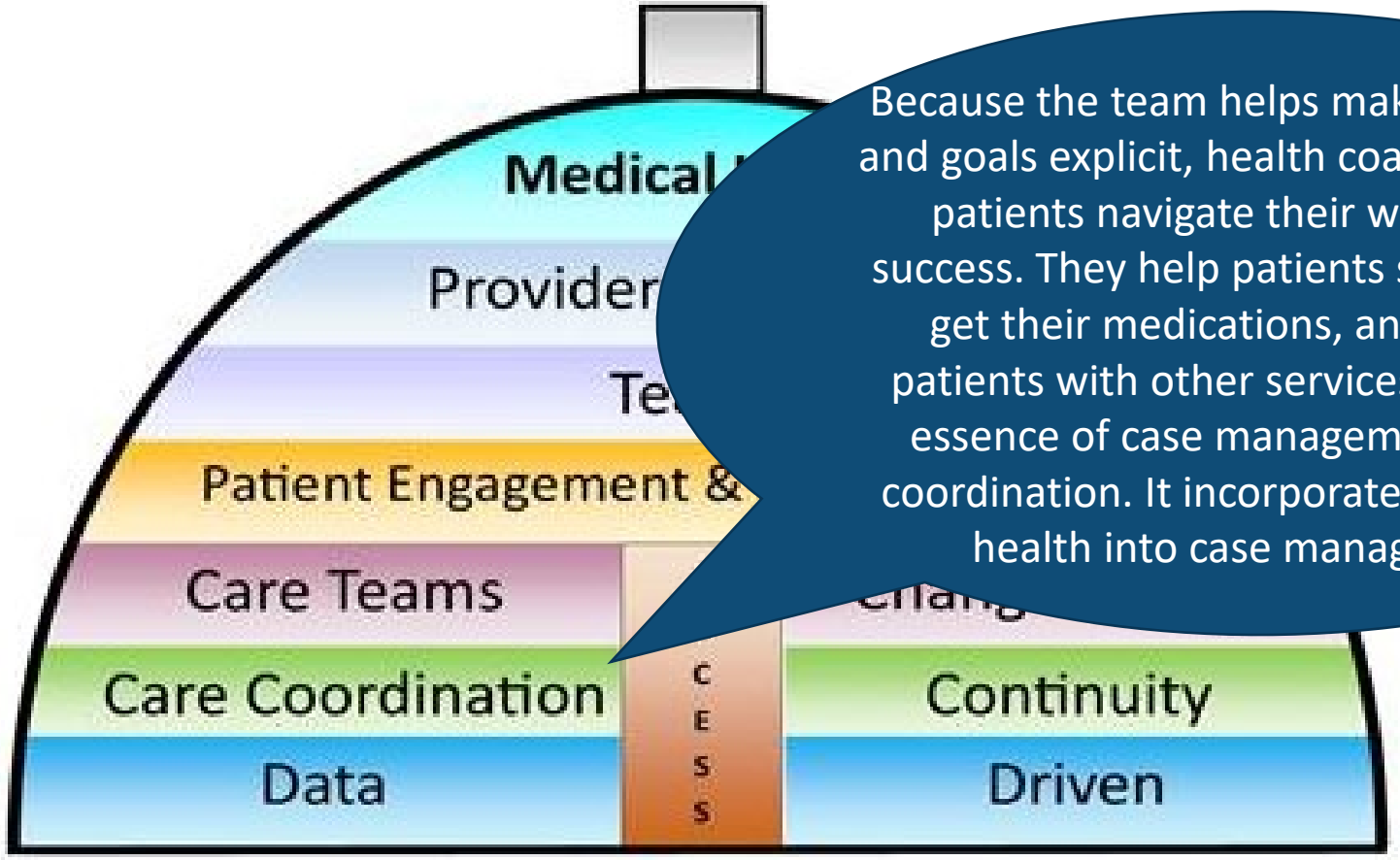


Health coaches build rapport with their patients. Over several visits, a relationship develops and trust grows. The care team benefits.

http://www.foma.org/patient-centered-medical-home.html

Medical Home Model: Primary care based

Navajo Hogan

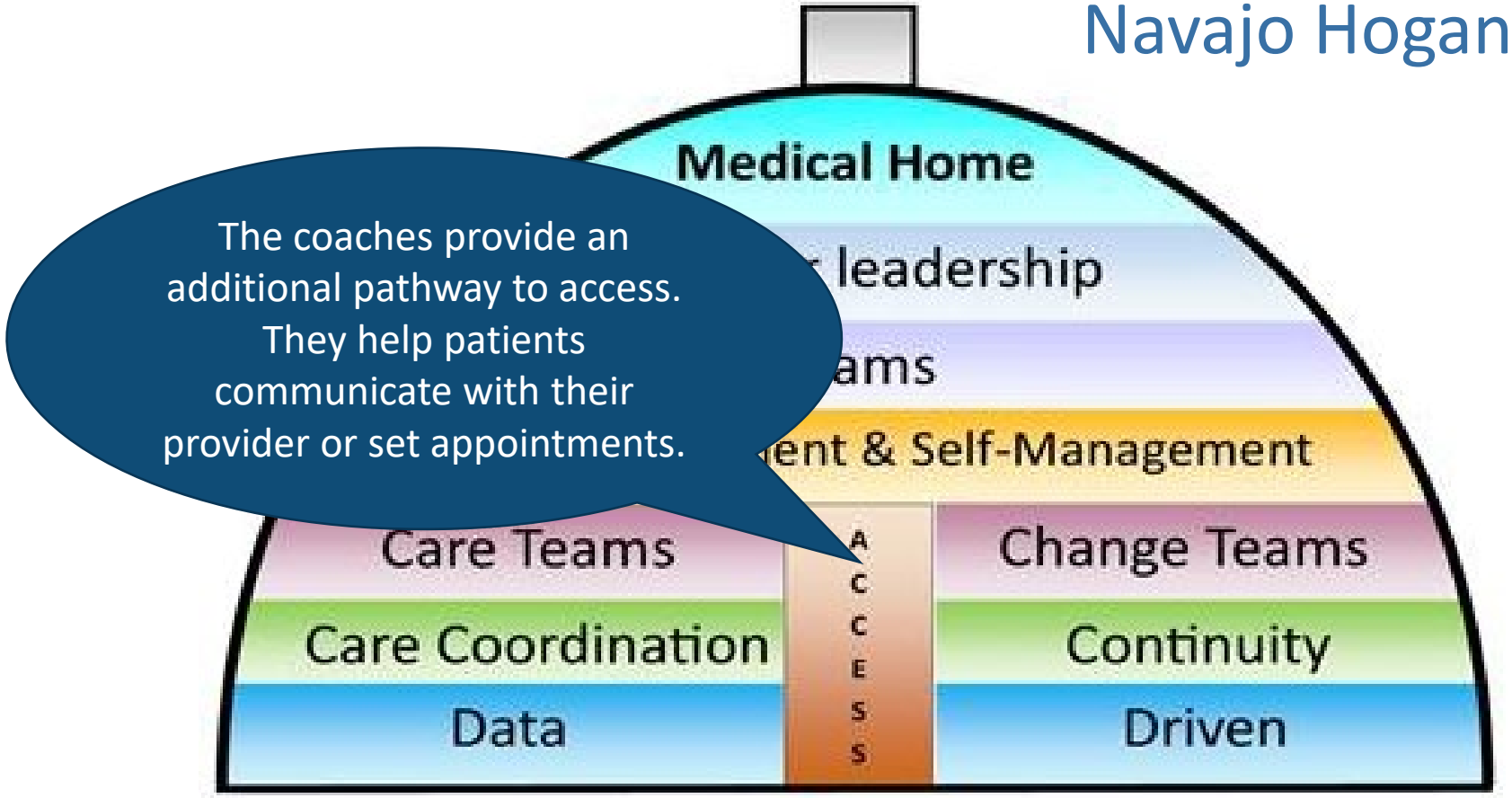


Because the team helps make care needs and goals explicit, health coaches can help patients navigate their way toward success. They help patients stay on track, get their medications, and connect patients with other services. This is the essence of case management or care coordination. It incorporates population health into case management.

http://www.foma.org/patient-centered-medical-home.html

Medical Home Model: Primary care based

Navajo Hogan



http://www.foma.org/patient-centered-medical-home.html

How do we train health coaches?

- ADCES para-professional competencies and certificate
- Motivational interviewing training and certificate
- Brief-action planning certificate
- Nutrition certificate as a health coach at the Central Arizona College
- Navajo Wellness Model
- Dine’ Healthy Aging Models instructor training
- Behavioral Health Assistant (suicide) training
- Tobacco cessation training

Association of Diabetes Care & Education Specialists (ADCES)

<u>7 Diabetes Self-Care Behaviors</u>

- Healthy Coping
- Healthy Eating
- Being Active
- Taking Medication
- Monitoring
- Reducing Risks
- Problem Solving

Image from ADCES7 Self-Care Behaviors®

Ideal health coach skills and attributes

Skills

- Principles of behavior change and communication
- Pathophysiology and disease understanding
- Teamwork
- Relationship-based healthcare delivery
- Familiarity with DM devices (glucometers, pens, CGM's, computer applications for downloads)

Attributes

- Clanship
- Communication style
- Familiar hobbies, trade, likes
- Understanding of Historical trauma
- Cultural competence
  - Community taboos, biases, fears, beliefs, and perspective
  - Common experiences with community members

Orientation and Mentorship

Training

- Orientation with shadowing
- Mandatories & competencies
- Staff meetings
- Real-time clinical support
  - Lead health coach
  - RN lead
  - Provider consultant

Mentorship and ongoing motivation

- Clear mission
- Education sessions weekly
- Success Stories
  - Light bulb moments
- Case discussions – continuous
  - Review for enhanced experience
  - Support – ongoing learning
  - Warm hand off to another health coach
- A job description that fills a real need, gives the HC a “sense of pride”
- Advocacy

Electronic data help

- Data and information management
- RPMS/EHR/Templates
  - Wellness reminders (exams, etc)
- iCare
  - Pre-plan with the daily provider huddle, case management, data
- Data measures
  - Best practice, quarterly audit, comprehensive care measures, customer service and workload for health coaches, report card for providers
  - Data informatics tech for real-time support
- Improvement initiatives

Diabetes Population Health Strategies

Case-Management	Goal
Pre-Diabetes	Educate patients with a diagnosis of pre-DM – give updated handouts and referrals to the wellness center and nutrition
New DM Diagnosis	Engage patients with a new diagnosis DM patients in care, support their personal journey with DM, educate them about DM and its management (ADCES self-care behaviors), and treat with lifestyle interventions and medications
Healthy Heart	A1C < 8, Blood pressure < 130/80, Statin use for patients that have risk factors to decrease cardiovascular risk
Special Obstetrics Clinic (SCOB)	Engage and educate patients with a diagnosis of gestational diabetes, T1DM & T2DM. This engagement includes post-partum care
Inpatient/Emergency/Urgent Care	Influence patients to use their care teams for follow-up and introduce Diabetes Health Coach model-of-care
Teen/Pediatric clinic	Healthy Habit and SMART goal setting
ADCES patients	Glycemic control and risk reduction utilizing motivational interviewing with goal setting and follow-up

A Patient with new onset diabetes diagnosis

- 41-year-old male, with symptoms of poorly controlled DM
- Finding of blood sugar 250's, A1c 10.7%.
  - Blood pressure 154/89
- Background of problematic binge drinking with consequences
  - ER visits with alcohol withdrawal
  - Motivated to remain sober
- DM assessment
  - Employed, sometimes out of town
  - Confident to manage his health problems
  - Self-identified literacy concern
  - No food insecurity
  - Has social support from family and friends

Initial Visit

Basics of Diabetes

Self-Management Education and Support

Healthy Lifestyle Behaviors

Medication Management

DM Health Maintenance

Other Care Needs
Binge Drinking of Alcohol

Initial Visit: Oct 28

Elements of Diabetes Care	Current Visit
Basics of Diabetes	Introduction to DM Health Coach Disease Process Diabetes Complications and Prevention DM labs drawn Return visit planned for one week
Self-Management Education and Support	Glucometer dispensed with training Began education of self-care behaviors and lightly introduced SMART Goal setting
Healthy Lifestyle Behaviors	Nutrition – drinking 4 energy drinks daily Education about physical activity/exercise
Medication Management	Did not want to start medications
DM Health Maintenance	Education about immunizations Accepted influenza and COVID vaccines
Other Care Needs Binge Drinking of Alcohol	Previously prescribed Naltrexone, not taking Not wanting Integrated Behavioral Health

Second Visit: Nov 5

Elements of DM Care	Previous Visits	Current Visit
Basics of Diabetes	Introduction to DM Health Coach	DM Symptoms Resolved Blood sugar ranges were 150-250 Return visit in one month
Self-Management Education and Support	Glucometer dispensed with training	Glucometer review Discussed timing of blood sugar checks
Healthy Lifestyle Behaviors	Nutrition –4 energy drinks daily Physical activity/Exercise	Stopped Energy drinks
Medication Management	Did not want to start medications	Start Metformin – 500 mg daily → BID
DM Health Maintenance	Accepted COVID and influenza vaccine	PCV 20 Vaccine Foot Exam
Other Care Needs **Binge Drinking of Alcohol**	Sober Aware of but not using care options (referrals and medications)	Remained sober Accepted information about Integrated Behavioral Health

Third Visit: Dec 2

Elements of DM Care	Previous Visits	Current Visit
Basics of Diabetes	Introduction to DM Health Coach, Symptoms improved	A1c recheck 10.7% → 9.3% in 5 weeks Stated that the blood sugar ranges were 100-150
Self-Management Education and Support	Using glucometer	No glucometer, reports lower sugars at home
Healthy Lifestyle Behaviors	Stopped sugar sweetened beverages	Revisit goals for nutrition and exercise
Medication Management	On Metformin 1GM/day	Reports taking metformin twice a day Increase Metformin to 1GM BID
DM Health Maintenance	Took 3 vaccines Foot exam	Started Atorvastatin for hyperlipidemia Eye Exam
Other Care Needs Binge Drinking of Alcohol	Not wanting Integrated Behavioral Health or resume Naltrexone	Remained sober, no alcohol cravings Reports having information about Integrated Behavioral Health and AA

What do we need to do to be successful?

Quality Improvement: Early and Sustained Glycemic Control

- Background
  - Growing body of literature supporting a **legacy** benefit: Glycemic improvement early in DM has greater impact on mortality and macrovascular outcomes than a similar glycemic improvement later in the course of diabetes (Bhattacharya, 2024)
    - An important finding from population health studies, applicable to case management and health coaching
- New onset patients with multiple needs
  - Engagement in primary care for on-going monitoring and DM care
  - Working through resistance
  - Medications every day when you feel well

Bhattacharya, S. (2024, November). *Forty-four Years of the UK Prospective Diabetes Study: Legacy Effect and Beyond*. 1. https://touchendocrinology.com/diabetes/journal-articles/forty-four-years-of-the-uk-prospective-diabetes-study-legacy-effect-and-beyond/https://doi.org/10.17925/EE.2025.21.1.8

Quality Improvement: Early and Sustained Glycemic Control

- Target population
  - New onset diabetes diagnosis for patients, “cohorted” by calendar year, who live and choose CSU as their care site (having additional primary care in CSU after diagnosis)
    - We had previous criteria with A1c criteria (≥8%), age limit (30-60), and no additional visit requirement
- Primary Goal – A1c improvement
  - Secondary goals were other DM measures
- Interventions directed at engagement, education, and self-management
  - Health coach for every patient, case management if gaps in care
  - Additional education and support from clinic-based partners
  - Outreach if no primary care in six months

2025 taught us…

	A1C at diagnosis	Last A1C in 2025	Change in A1C	P Value
Average A1C	9.23%	7.56%	1.67%	<0.001

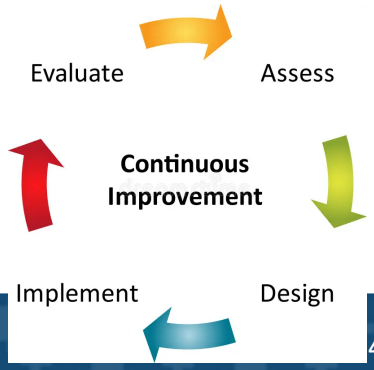
	A1c <7%	A1c 7%-7.9%	A1c 8% or Greater
At diagnosis in 2024	22 (31%)	10 (14%)	39 (55%)
Latest 2025 A1c value	44 (62%)	11 (15%)	16 (22%)

The chi-squared test for this categorical change resulted in a p value = 0.0002.

	Lower A1c (reduction of ≥0.5%)	Unchanged A1c (change ±0.4%)	Higher A1c (rise of ≥0.5%)
Number of patients	49 (69%)	16 (23%)	6 (8%)

Using population health in case management

- We translated population evidence into care
  - Identified evidence that earlier control has life-long benefits
  - We selected patients with newly diagnosed diabetes from the EHR
  - Used case management to intervene with newly diagnosed individuals
  - Delivered education with health coach support
  - Tailored strategies for implementation of contact to the needs of the population and the clinic
  - Evaluated glycemic control
  - Adapted program implementation



Wrapping it up…

- Reviewed the definition of case management and health coaching integrated into primary care, and how case management and health coaching programs may
  - Improve patient-centered clinical services
  - Be practiced applying principles of population health
- Described mentorship and team-building of health coaches and development of case management skills.
- Demonstrated this work as it played out in a clinical case and a quality improvement project.


INDIAN HEALTH SERVICE
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