

National Council of Informatics

# 2024 NATIONAL COMBINED COUNCILS VIRTUAL MEETING

Optimizing technology and teamwork to increase our  
healthcare system potential: Recommendations from the  
National Council of Informatics

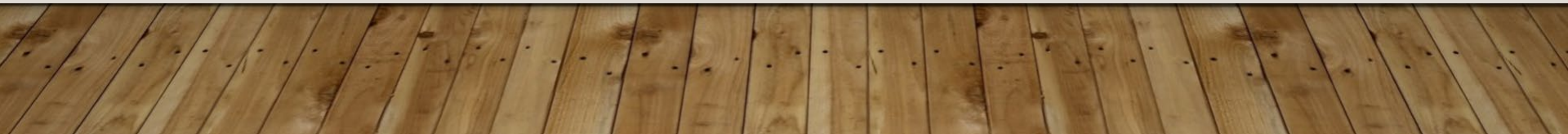
MARCH 19-21, 2024

Dr. Susy Postal-Sponsor

CAPT Wil Darwin-Vice Chair

CDR Donnie Hodge-Chair

CDR John Collins-Secretary



# PRESENTERS

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- CDR Donnie Hodge
- CAPT Wil Darwin
- CAPT Jana Towne
- Dr. Philippe Champagne
- Ms. Natalie Tuttle
- CDR John Collins

# CLINICAL DECISION SUPPORT(CDS) TOOLS IN SYPHILIS / STI

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The increase incidence and prevalence of Syphilis/STI throughout AI/AN communities means testing and treatment is critical to decrease disease morbidity and mortality.

# BACKGROUND

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- Rates of syphilis have been very high throughout the United States, and this is especially true in Indian Country. As syphilis rates rise, it is important to consider increased syphilis testing and treatment efforts. Understanding primary & secondary syphilis rates in Areas can better direct syphilis screening efforts.
- CDC recommends screening all pregnant people at least once during their pregnancy and an individual, risk-based approach to syphilis screening for others. Improving data analytics to better understand data will provide access to syphilis testing and treatment for everyone. Identifying and preventing syphilis before pregnancy can also help prevent congenital syphilis.
- The main drivers are thought to be access to care. Following up with syphilis patients for treatment and contact tracing to end this epidemic are resource intensive. Better inclusive integrated health programs to coordinate syphilis care with patients and partners has proven effective.

# CDC SURVEILLANCE DATA

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- Syphilis rates are trending. From 2021 to 2022, the rate of primary and secondary syphilis increased from 48 to 67 per 100,000 person, representing a 40% increase.
- From 2018 to 2022 the rate among AI/AN increased over 400%, from 16 to 67 per one hundred thousand persons.
- AI/AN continue to have the highest rates and this disparity is widening. Using Whites as the reference group, AI/AN experienced a rate about 2.5 times higher in 2018, a gap that has grown to nearly seven times higher in 2022.
- AI/AN women have the highest rate of syphilis compared to any race.
- The rate among AI/AN females increased 44% from 2021 to 2022. The disparity compared to whites is nearly tenfold. This is of course a driver of congenital syphilis.
- The rate of congenital syphilis from 2018 to 2022 has increased over 500%. Just in 2022 year, it has increased nearly 70%.

# CDS TOOLS IN RPMS-EHR TECHNOLOGIES

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1. Alerts and Reminders
2. Clinical Guidelines
3. Condition-Specific Order Sets
4. Focused Patient Data Reports and Summaries
5. Documentation Templates
6. Diagnostic Support
7. Contextually Relevant Reference Information
8. Case Management

# EFFORTS AND OPPORTUNITIES - 1

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- Alerts and Reminders
  - Clinical Reminder (RPR) – Annual Screening
  - **Residual:** Non RPR Screening Clinical Reminder like GC/C development
- Clinical Guidelines
  - Syphilis/STI End-the-Syndemic Informatics Response
  - CDC Treatment Guidelines
  - **Residual:** Ongoing technical support
- Condition-Specific Order Sets
  - Lab
    - RPR/STI/HIV/Viral Hepatitis testing bundle
    - **Residual:** Ongoing technical support
  - Meds
    - RPR/STI/HIV/Viral Hepatitis specific medication order sets on a designated menu
    - **Residual:** Ongoing technical support
- Focused Patient Data Reports and Summaries
  - Health Summaries - RPR/STI/HIV/Viral Hepatitis
  - **Residual:** Ongoing technical support
- Documentation Templates
  - TIU Dialogs
  - **Residual:**
    - Ongoing technical support
    - Develop specific RPR/STI/HIV/Viral Hepatitis TIU Dialog
- Diagnostic Support
  - Lab
    - STI/HIV/Viral hepatitis testing bundle
    - Adoption of "Golden Ticket Testing": On-demand, no-provider/no nurse lab visits for testing
  - **Residual:** Ongoing technical support

# EFFORTS AND OPPORTUNITIES - 2

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- Contextually Relevant Reference Information

- CDC Treatment Guidelines
- IHS EHR-RPMS iCARE Population Management system
- **Residual:**
  - Incorporate training surrounding Care Management group (STI/STD/HepC/HIV) utility for RPR/STI(GC/C)/HIV/Viral Hepatitis
  - Create and consolidate STI/STD; HepC; HIV into one simplified Care Management group

- Case Management

- Patient panel – age cohort
- High risk patient panel (Pregnant women; Substance Users, etc.)
- Contact Tracing
- Outreach/Marketing/Testing Campaign
- **Residual:**
  - Continued IHS EHR-RPMS iCARE Population Management system training
  - Re-evaluate existing or formulate best practice Contact Tracing Standards Operating Document
  - Re-evaluate current Public Relations Marketing materials



# ONWARD – UPWARD – FORWARD

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- Continuation of the END-THE-SYNDEMIC (ETS) RPMS-EHR CLINICAL INFORMATICS RESPONSE SERIES for ongoing clinical and technical support.
- Continuation of a multi-disciplinary team approach to support, adopt, integrate, deploy, and sustain tools.
- Continued IHS Leadership to support initiative and outreach.

**Social Drivers Of Health (SDOH)**  
**IHS National Actions to Address**

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# ON TERMINOLOGY: DETERMINANTS VS DRIVERS

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- The use of “Determinants” versus “Drivers” is generally used interchangeably when discussing SDOH. However, the use of “Drivers” instead of “Determinants” is increasingly favored as the use of “determinants” implies a finality and immutability that incorrectly reduces the agency of communities and individuals to impact their health.

# UNDERSTANDING FOUNDATIONS

## Social Determinants of Health (SDOH)

The conditions in which people are born, grow up, live, work and age which influence a person's opportunity to be healthy, his/her risk of illness and life expectancy. (Health People 2030)



## Social Risk Factors

Adverse social conditions associated with poor health, such as food insecurity and housing instability.



## Health Related Social Needs (HRSN)

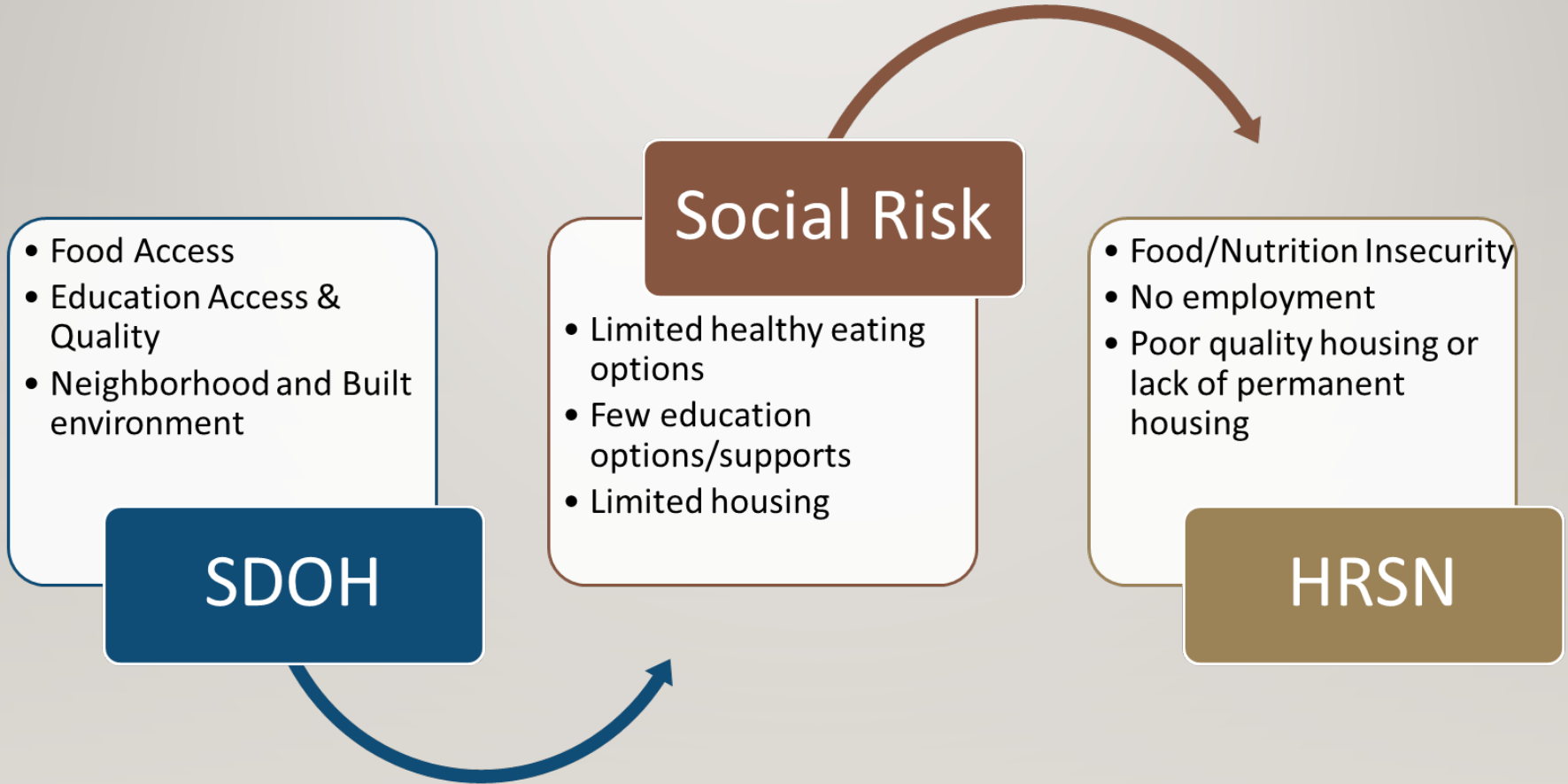
An individual's unmet, adverse social conditions that contribute to poor health.



<https://www.milbank.org/quarterly/articles/meanings-and-misunderstandings-a-social-determinants-of-health-lexicon-for-health-care-systems/>

<https://www.healthaffairs.org/doi/10.1377/forefront.20191025.776011/>

# DISPARITIES FUNDAMENTAL ASPECTS



# SDOH: ACCREDITATION AND REGULATORY REQUIREMENTS

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- CMS FY23 Hospital Inpatient Prospective Payment System (IPPS) Inpatient Quality Report (IQR)
- TJC National Patient Safety Goal 16
- MIPS Clinical Quality Measure #487

# CMS FY23 IPPS INPATIENT QUALITY REPORTING

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## FINAL RULE:

- SDOH-1: % of patients  $\geq 18$  years old admitted to the hospital screened for SDOH (Food, Housing, Transportation, Utilities, Interpersonal Safety)
- SDOH-2: % of patients screened for SDOH (per above) that are positive reported separately for each domain

# TJC: NATIONAL PATIENT SAFETY GOAL 16

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## **01.01: Improving health care equity for the [organization's] [patients] is a quality and safety priority.**

EP 1: The [organization] designates an individual(s) to lead activities to improve health care equity for the [organization's] [patients].

EP 2: The [organization] assesses the [patient's] health-related social needs (HRSNs) and provides information about community resources and support services.

EP 3: The [organization] identifies health care disparities in its [patient] population by stratifying quality and safety data using the sociodemographic characteristics of the [organization's] [patients].

EP 4: The [organization] develops a written action plan that describes how it will improve health care equity by addressing at least one of the health care disparities identified in its [patient] population.

EP 5: The [organization] acts when it does not sustain the goal(s) in its action plan to improve health care equity.

EP 6: At least annually, the [organization] informs key stakeholders, including leaders, licensed practitioners, and staff, about its progress to improve health care equity.



## MIPS CLINICAL QUALITY MEASURE #487

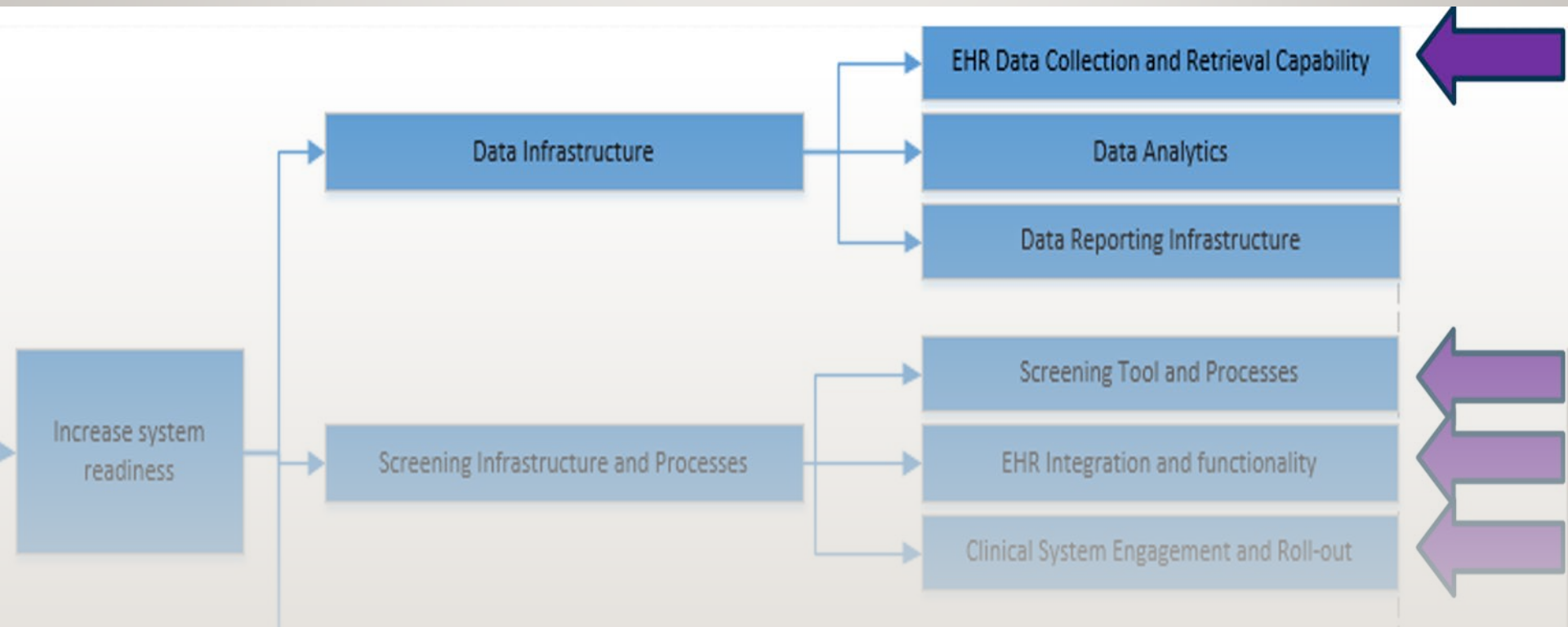
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- % of patients  $\geq$  18 years old screened for SDOH (Food, Housing, Transportation, Utilities, Interpersonal Safety) in the last year

# UNDERSTANDING THE DRIVERS



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# SDOH: IMPROVING PATIENT CARE IHS LEARNING LAB 2023

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Test how the IHS can implement HRSN screening programs including HRSN screening tools, workflow design, documentation, and data analysis.

## Four (4) Sites

1. **Zuni Indian Hospital**—Albuquerque Area
2. **Wagner Indian Health Service Clinic**—Great Plains Area
3. **Lawton Indian Hospital**—Oklahoma City Area
4. **Warm Springs Service Unit**—Portland Area

Thank you to Whiteriver Service Unit Informaticists (Justin Tafoya and Trevor Thompson) who helped immeasurably with designing and testing RPMS workflows.



# SDOH: IHS LEARNING LAB SUMMARY 2023

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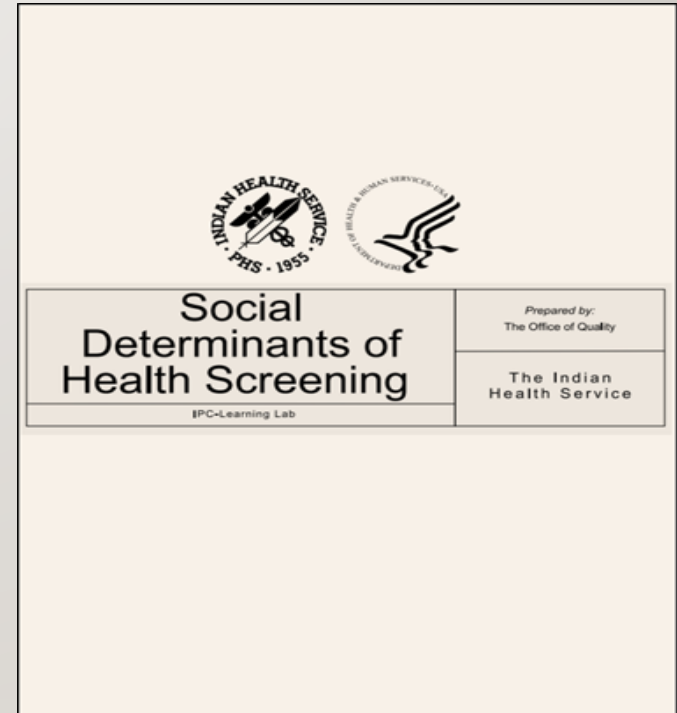
- **Insights gained:**

- A single tool will not meet all needs
- Sites prefer autonomy over tool and questions used to match community needs
- Community resource lists need to be developed to facilitate referral
- Although staff is initially hesitant to screen (workload, lack of interventions for positive screening), overall process is well received by patients and staff
- Patients overwhelmingly support HRSN screening
- Documentation and data work (aggregation, analysis) is time-consuming as a manual process
- Limited Clinical Informaticist bandwidth will require central support to accelerate development

# SDOH: SCREENING TOOLKIT

A Toolkit that guides a facility through the steps necessary to start SDOH screening with lessons learned from the Learning Lab incorporated.

1. Preparation
2. Tool Selection
3. Workflow Development
4. Screening Documentation
5. Respond to Findings
6. Closing the Loop



LINK:

[IPC Learning Lab Social Drivers of Health Screening \(SDOH\) Toolkit](#)

# RPMS ENHANCEMENTS TIMELINE

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## January 2024

- AUM Patch
- Addition of SDOH Screening Exam Codes
  - Food
  - Housing
  - Transportation
  - Utilities
  - Interpersonal Safety
- Captures positive, negative, refusal, or unable to assess

## November 2024

- Reporting (e.g. AMH)

## 2025

- Clinical Reminder (Annual)
- Clinical Reminder Dialog
  - Documents screening by DOMAIN, not individual questions to allow flexibility at each facility to use that tool they wish

# ANTICIPATED USE CASES FOR STRUCTURED SDOH DATA

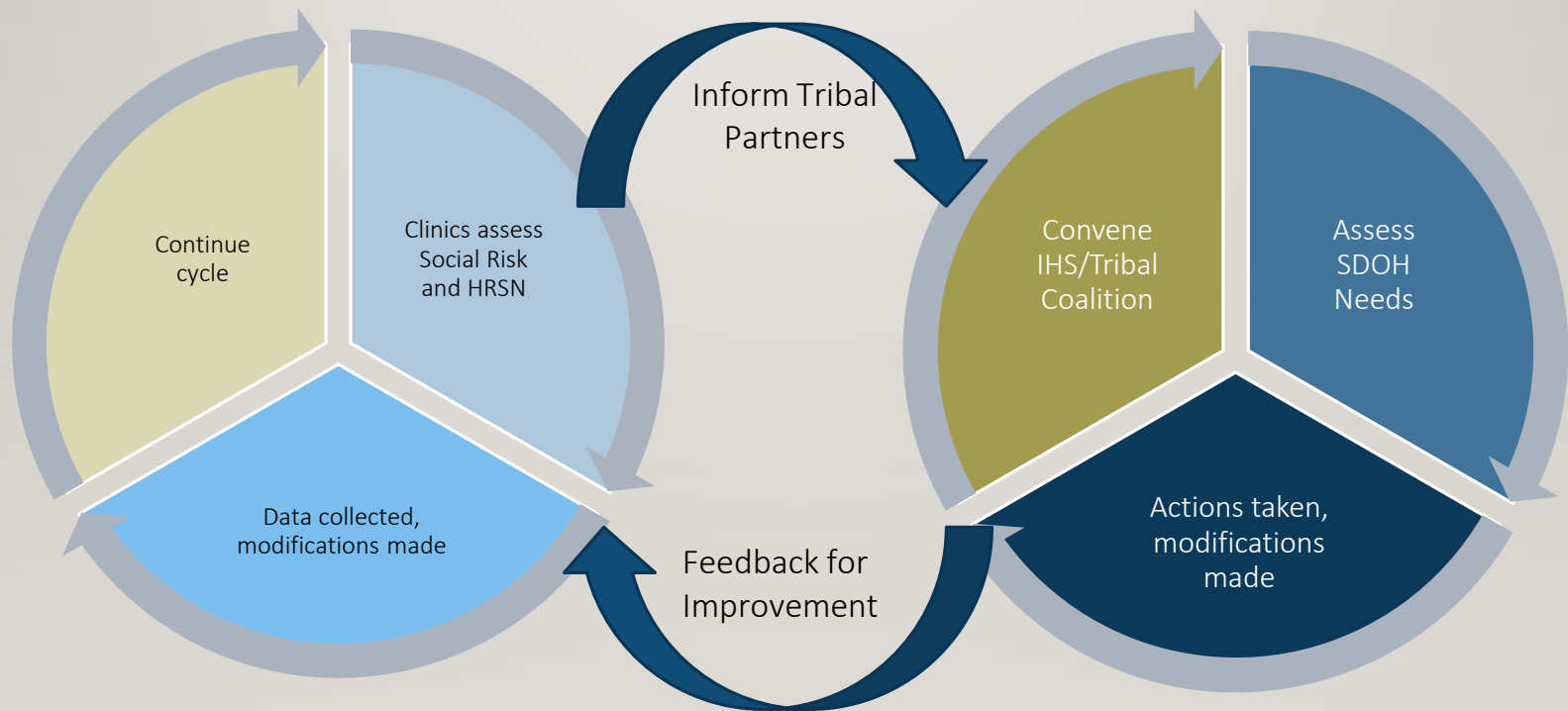
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- 1. Panel Management/Population Health:** Increase capacity of clinical teams to identify and assist each patient with HRSNs and facilitates panel management/population health approaches (e.g. registry in iCare). Facilitate track of referrals and closing the loop.
- 2. Reporting:** Screening for HRSN related to Food, Housing, Transportation, Utilities, and Interpersonal Safety in combination meets criteria for the SDOH-1 and SDOH-2 measures for CMS IQR, for example.
- 3. Governance:** Screening results can be collected and analyzed at the facility level to inform leadership, complement community health needs assessments, and augment capacity to address issues of equity. These activities also align with accreditation requirements (e.g. TJC NPSG 16).
- 4. Upstream/Whole of System Interventions:** Aggregated screening results at the Area and HQ level will also inform leadership and augment capacity.



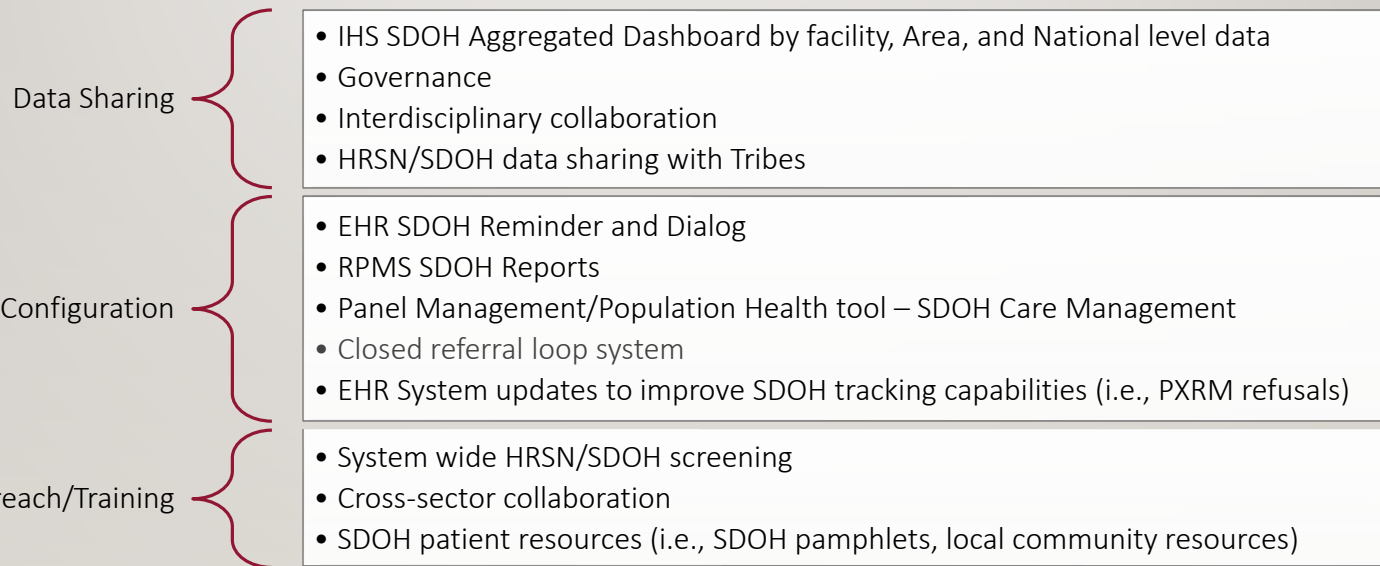
# Next Steps: SDOH Cycles of Improvement

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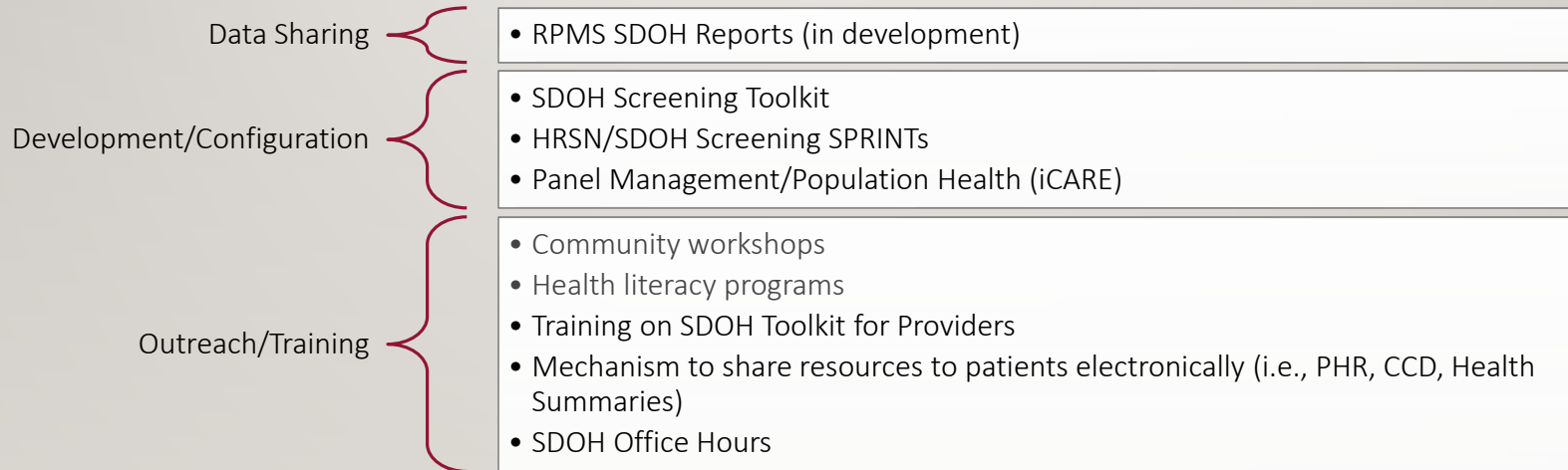
# SDOH: RESIDUAL NEEDS

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# SDOH: RESIDUAL SOLUTIONS

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# POLICY ORDERS

# POLICY ORDERS: THE PROBLEM

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Compliance with CMS Conditions of Participation, AAAHC and Joint Commission Standards:

- Lack of order **authentication** via RPMS EHR (technical)
- Lack of adherence to procedural requirements (administrative)

# POLICY ORDERS: BACKGROUND

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42 CFR, subchapter G, § 482.24 (c)(3)

- i. Reviewed and approved by Medical Staff, Nursing, Pharmacy
- ii. Consistent with nationally recognized, evidenced-based guidelines
- iii. Periodically & regularly re-reviewed (Med Staff, Nursing, Pharmacy)
- iv. Dated, timed, and **authenticated** promptly in the patient's medical record

# POLICY ORDERS: PROGRESS

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- EHR Version 1.1 Patch 36 to include authentication functionality
- Anticipated release: February or March 2024

# POLICY ORDERS: RESIDUAL NEEDS

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## Technical:

- Training
- Configuration of the functionality
- Configuration of clinical decision support tools

## Administrative:

- Training
- Review and updates of existing Policies



# POLICY ORDERS: SOLUTIONS

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- Awareness
- Support
- Training
- Communication (vertical and horizontal)
- Ongoing Quality Assurance
- Collaboration (IHS Office of Quality, Office of Regulatory Affairs and Policy, CMS)

# OUTPATIENT USE OF BAR CODE MEDICATION ADMINISTRATION (BCMA)

# BCMA: PATIENT SAFETY

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- 2022-2023 Institute for Safe Medication Practices (ISMP) Targeted Medication Safety Best Practice – New best practice 18:
  - Maximize barcode verification PRIOR to medication administration beyond inpatient care areas
  - Target Clinical areas with increased risk (e.g. emergency department, perioperative areas, infusion clinics, dialysis centers, radiology, labor and delivery areas, catheterization laboratory, outpatient areas)
  - Prevent errors due to packaging, doses, name, labels
  - Prevent wrong patient errors
  - Decrease duplicate doses and missed doses

# BCMA: ACCREDITATION AND SURVEY

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- Lack of uniform medication administration documentation processes across sites has led to findings by Joint Commission and Center for Medicare Services
- BCMA supports uniform and consistent medication administration documentation
  - BCMA documents medication administration in real time
  - This documentation is available throughout the facility
  - Information included in documents shared outside the facilities (e.g. transfer records)

# HISTORY OF BCMA IN IHS

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- IHS first deployed in 2011 for inpatient settings
- New Clinic BCMA functionality added 2023
  - Ability to be used in Ambulatory settings

# I-STAR:BCMA PREVENTABLE MEDICATION ERRORS

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Clinic	Events	Percentage of all Med Errors
<b>Emergency Dept</b>	1990	34%
<b>Outpatient Dept/Clinic</b>	678	12%
<b>Family Med</b>	250	4%
<b>Urgent Care</b>	73	1%
<b>Women's Clinic</b>	28	0.5%
<b>NonED Outpatient Clinic (Combined)</b>	1029	18%
<b>Total</b>	3019	52%

•Total Medication Errors Reported: 5823

\*The intent of this slide is to provide a visual on the medication errors at IHS Federal Facilities that occurred prior to the use of BCMA. The use of BCMA provides an excellent opportunity to decrease medication error rates .\*

# I-STAR:BCMA PREVENTABLE MEDICATION ERRORS(2)

Event Subtype	Cat C	Cat D	Cat E	Cat F	Cat G	Cat H	Total
<b>Expired/Deteriorated product</b>	123	26	0	0	0	0	149
<b>Incorrect Dosage Form</b>	181	16	5	0	0	0	202
<b>Extra dose(s)</b>	370	66	5	0	1	0	442
<b>Incorrect dose</b>	953	141	13	6	0	1	984
<b>Incorrect medication/substance</b>	548	56	9	0	0	0	613
<b>Incorrect Patient</b>	270	26	1	1	0	0	298
<b>Incorrect route of administration</b>	64	15	4	0	0	0	83
<b>Incorrect strength or concentration</b>	73	11	1	0	0	0	85
<b>Incorrect timing</b>	197	28	1	0	0	0	226
<b>Mislabeling</b>	86	11	2	0	0	0	99
<b>Omission</b>	573	107	23	4	0	0	707
<b>Total</b>	3438	503	64	11	1	1	3888

# CONTINUED NEEDS FOR SUCCESS

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- Implementation in all areas of IHS where staff administers medications
- BCMA champions needed at all sites for success
- Staff participation and buy in
- Support and Insistence to implement from all stakeholders
- Equipment is a need at some facilities
- Adequate Pharmacy Staffing (e.g. Emergency Room Pharmacist)
- Training , configuration, and deployment



# CURRENT AND PROPOSED SOLUTIONS

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- Current:
  - IHS wide trainings offered <https://www.ihs.gov/bcma/clinicaloverview/>
  - OIT individual facility session
- Proposed:
  - BCMA office hours
  - Incentives for facilities based on BCMA scan rates/improved usage
  - Re-evaluate our mindset (Invest in staff, training, and equipment as a means to decrease error)
  - Succession plans

# THANK YOU

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- CAPT Latona Austin
- Ms. Naomi Bruinius
- Mr. Michael Cabana - VHA
- Dr. Philippe Champagne
- CDR John Collins
- CAPT Wil Darwin
- CAPT(ret) Cornelius Dial
- CDR Donnie Hodge
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- LCDR Brandy Lewis
- CAPT Mike Lee
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- Ms. Marcie Platero
- Dr. Susy Postal
- CAPT Amy Rubin
- CAPT(ret) David Taylor
- Mr. Raymond Tierney
- CAPT Jana Towne
- Ms. Natalie Tuttle
- Ms. Wendy Wisdom
- LCDR Kristen Young

# QUESTIONS

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# THE NATIONAL COUNCILS

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- National Council of Behavioral Health
- National Council of Chief Clinical Consultants
- National Council of Chief Executive Officers
- National Council of Chief Medical Officers
- National Council of Clinical Directors
- National Council of Executive Officers
  - National Council of Informatics
- National Laboratory Professionals Council
  - National Nurse Leadership Council
  - National Oral Health Council
  - National Pharmacy Council
  - National Quality Council