Graphs and Images

From Research to Quality Improvement: Adolescent NG/CT Screening and Lessons Learned from a Texas Academic Medical Center

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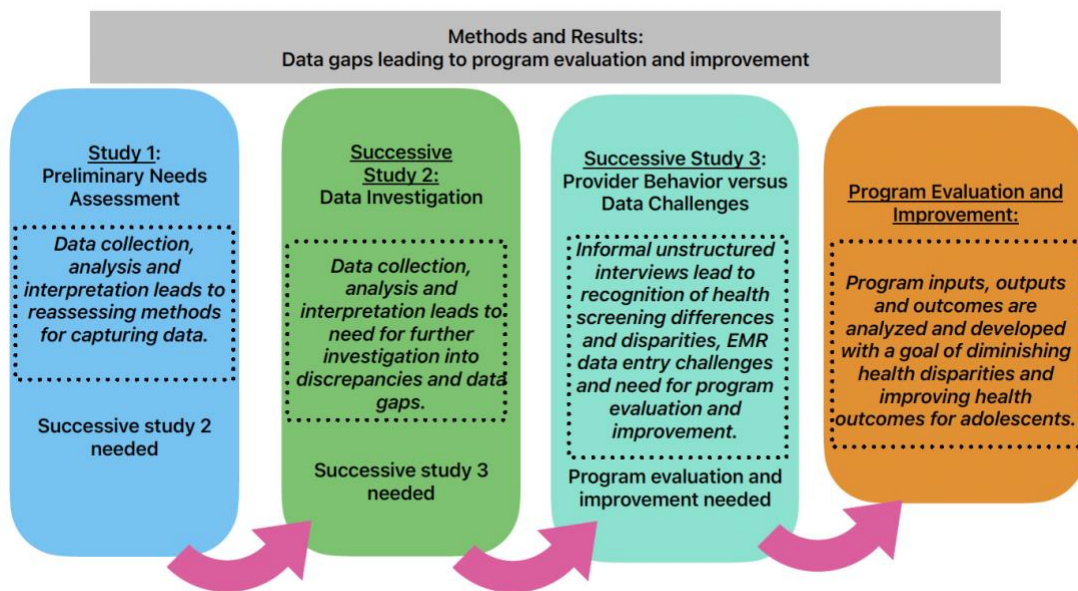
Figure 1: Methods and Results Overview

Table 1. EMR Variables Requested for Analysis.

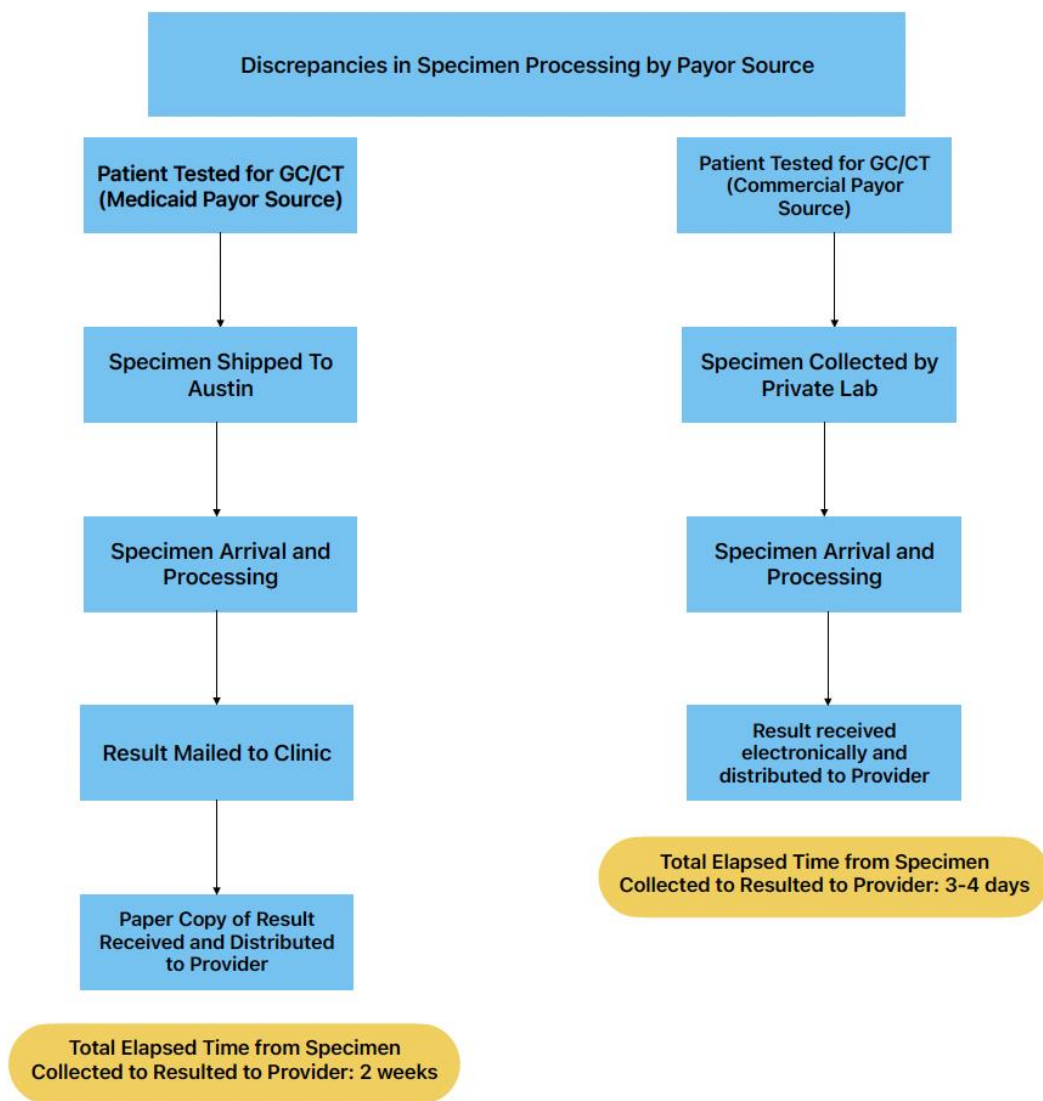|	
General Parameters	Date of visit
	Notation if a visit was a well-check
	Patient height and weight, date of birth, and age
	Clinic Location and medical provider seen
	Payer source
	Patient race, ethnicity, sex, language and zip code
Sexual Health Parameters	NG*, CT*, syphilis and HIV screening
	NG diagnosis*
	CT diagnosis*
	HIV diagnosis
	HPV vaccine received
	Pregnancy testing
	Contraceptive Counseling
	Sexually active? (Y/N)*
	Practicing safe sex?* (Y/N/Sometimes)

*Indicates parameters of interest throughout research studies

Table 2. Data Results from Study 1 and Data Refinement for Study 2.

Study 1: Preliminary Needs Assessment	
Data Results	.1% proportion of patient visits screened for GC/CT
Data Refinement (Moving to Study 2)	Reassess ways to capture data apart from ICD-10 codes

Table 3. Data Results from Study 2 and Data Refinement for Study 3.

Study 2: Data Investigation	
Data Results	3% proportion of patient visits screened for GC/CT
	<0.2% patient visits with diagnoses of GC/CT
	6% of patient visits with sexual activity documentation
	3% of patient visits with safe sex practices documentation
Data Refinement **(Moving to Study 3)**	Resolving discrepancies in best ways to capture data
	Plan a series of informal unstructured interviews to improve understanding of data and system processes

Discrepancies in Specimen Processing by Payor Source

Patient Tested for GC/CT (Medicaid Payor Source)
→ Specimen Shipped To Austin
→ Specimen Arrival and Processing
→ Result Mailed to Clinic
→ Paper Copy of Result Received and Distributed to Provider
→ Total Elapsed Time from Specimen Collected to Resulted to Provider: 2 weeks

Patient Tested for GC/CT (Commercial Payor Source)
→ Specimen Collected by Private Lab
→ Specimen Arrival and Processing
→ Result received electronically and distributed to Provider
→ Total Elapsed Time from Specimen Collected to Resulted to Provider: 3-4 days

Figure 2. Discrepancies in Specimen Processing by Payor Source

Situation

Inadequate data recording and capture to properly represent gonorrhea/chlamydia screening, diagnoses, and sexual health history

Priorities:
1. Gonorrhea and chlamydia screening equitably.
2. Gonorrhea and chlamydia diagnosis recording and reporting equitably.
3. Sexual health history collection and reporting.

Inputs
1. Gonorrhea/chlamydia specimen collection materials.
2. Dedicated fax line for results
3. Clinic faculty and staff.
4. Quality and health information management team.
5. Health system leadership.

Outputs

Activities
1. DSHS lab utilization continues.
2. DSHS results are faxed to clinic.
3. Results are electronically entered and tasked to medical provider.
4. Training for medical staff and providers.
5. EMR adjustments.

Participation
1. Health System leadership.
2. Clinic staff and medical providers.
3. DSHS laboratory
4. Patients
5. Public

Outcomes

Short Term
1. Increase GC/CT screening that can be captured by data collection.
2. Faster receipt of GC/CT results.
3. Faster notification of results to patients.
4. Increased GC/CT diagnostic code use.

Intermediate
1. Improve ability to capture GC/CT screening and diagnostic data throughout health system.
2. Gather more accurate data on sexual health practices among adolescents.

Long Term
1. Decrease sexual health disparities in adolescents.
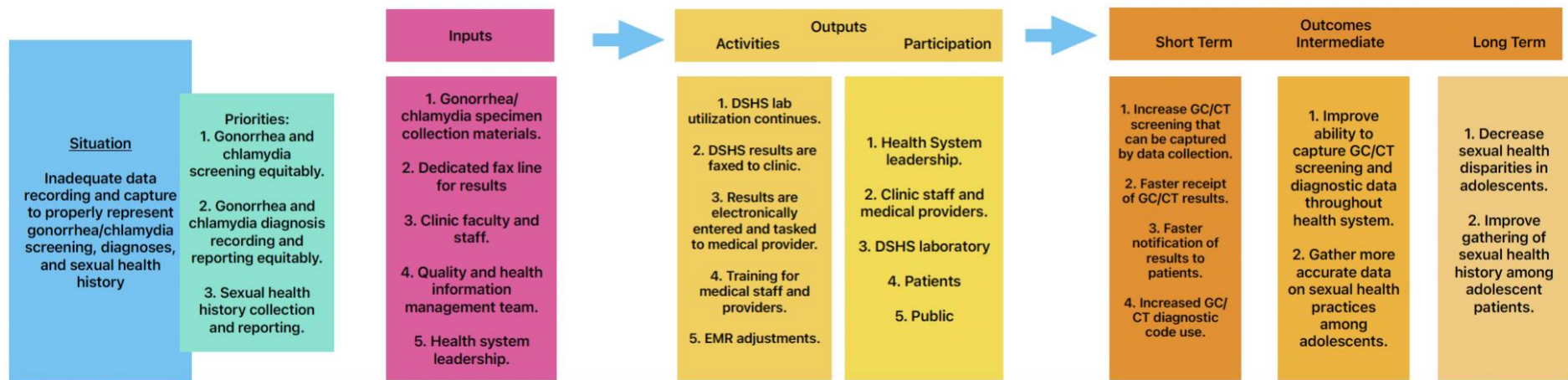2. Improve gathering of sexual health history among adolescent patients.

Figure 3: Adolescent Sexual Health Data Collection and Reporting: Program Improvement