

Customizing Data Infrastructure for Syringe Services Programs in North Carolina



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CONTEXT

- Evidence shows that comprehensive syringe services programs (SSPs) are safe, effective, and cost-saving, do not increase drug use, and are vital to preventing disease transmission and infections.
- North Carolina requires registered SSPs to report metrics (e.g., syringes and naloxone distributed) annually.
- Many SSPs have limited technology resources, using a combination of paper and free tools such as Google Sheets for data management.
- As many SSPs offer services beyond syringe distribution, such as linkage-to-care services and referrals to treatment, data management can become a challenge.
- Demand for services has been increasing since the beginning of the COVID-19 pandemic.

METHODS

- The Duke University School of Medicine Opioid Collaboratory partnered with Olive Branch Ministry (OBM) to develop a customized REDCap-based database system for SSPs.
- The initial design was inspired by Iowa Harm Reduction Coalition's database (<https://youtu.be/hBmeAM9Wifc>), OBM's paper forms, and annual reporting requirements for SSPs in NC.
- Duke REDCap developers programmed the database.
- We refined the database over several months in an iterative process of programming, testing with OBM, and modifying.
- We created a user manual to support training.
- Real data entry went live with OBM in January 2021.

RESULTS

The Record Home Page shows all of the forms available for a participant.

The system generates an ID number based on the SSP's format.

Record ID 3 ASH-CDF-1980-C

Data Collection Instrument	Baseline	Follow Up
Demographics (survey)		
Unique ID and Age		
SSP Intake (survey)		
Social Determinants of Health (survey)		
Services		+
Case Note		+
OORT Intake		
Authorization (survey)		
OORT Follow-up / Progress Note		
MAT Treatment		+
Hepatitis C Treatment		
Social Determinants Trends		
Services Table		

Forms for Opioid Overdose Response Teams include information release authorizations

Legend for status icons:

- Incomplete
- Unverified
- Complete
- Many statuses (mixed)
- Incomplete (no data saved) ?
- Partial Survey Response
- Completed Survey Response
- Many statuses (all same)

Data can be entered on a tablet, computer, or smart phone.



Complete the intake surveys yourself by scanning this QR code

Record ID 9
Unique ID: CAT-CDF-1980-C
Encounter County Cabarrus
Team member Andrea
Date 03-05-2021 Today M-D-Y

SSP

- ☒ Syringes out
- ☒ Syringes received for disposal
- ☐ Injection kits out
- ☐ Bio container out
- ☐ Condoms out
- ☐ Alcohol wipes
- ☐ Sterile water
- ☐ Cookers
- ☐ Cotton packets
- ☐ Tourniquets
- ☐ Band-aids
- ☐ Fentanyl test strips
- ☐ Bio container received for disposal
- ☐ Other supplies returned

Syringes out #
Syringes received for disposal #
Naloxone

Staff track supplies distributed, used syringes received, and other services provided using a repeating instrument.

Within the past year...

Did you worry that your food would run out before you got money to buy more? ☒ Yes ☐ No ☐ Prefer not to answer reset

Is having enough food a current need or concern? ☒ Yes ☐ No ☐ Prefer not to answer reset

Did the food you bought just not last and you didn't have money to get more? ☐ Yes ☒ No ☐ Prefer not to answer reset

Do you have housing? ☒ Yes ☐ No ☐ Prefer not to answer reset

Are you worried about losing your housing? ☐ Yes ☒ No ☐ Prefer not to answer reset

Have you or your family members you live with been unable to get utilities (heat, electricity) when it was really needed? ☐ Yes ☒ No ☐ Prefer not to answer reset

Has lack of transportation kept you from medical appointments, getting your medicines, non-medical meetings or appointments, work, or from getting things that you need? ☒ Yes ☐ No ☐ Prefer not to answer reset

Is transportation a current need or concern? ☐ Yes ☐ No ☐ Prefer not to answer reset

Do you feel physically and emotionally safe where you currently live? ☐ Yes ☐ No ☐ Prefer not to answer reset

The Social Determinants of Health survey collects information used both for case management, and for tracking program impact over time.

Participants can complete intake forms and SDOH surveys on tablets provided by the SSP, or on their own smartphones.



SSPs provide diverse services

Image credit: CDC, <https://www.cdc.gov/ssp/>

CONCLUSIONS

- SSPs are interested in and committed to high quality methods for data management
- More investment in data infrastructure for SSPs is needed

NEXT STEPS

- We are currently building a companion tool to make it easier for SSPs to work with and visualize their data.
- We are planning to adapt the database for scale up to additional SSPs
- There is interest from the NC Division of Public Health in hosting the database

This project is part of the Duke School of Medicine [Opioid Collaboratory](#) portfolio, funded by the Duke Endowment and administered through the Duke Department of Population Health Sciences, which is designed to save lives and reduce the harmful impact of opioids in North Carolina through the development, implementation, and evaluation of system-level interventions.

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