Qside: Act Now

Team members: Ritik Jain, Ritin Kalidindi, Naamna Modi, Gabriella Stickney
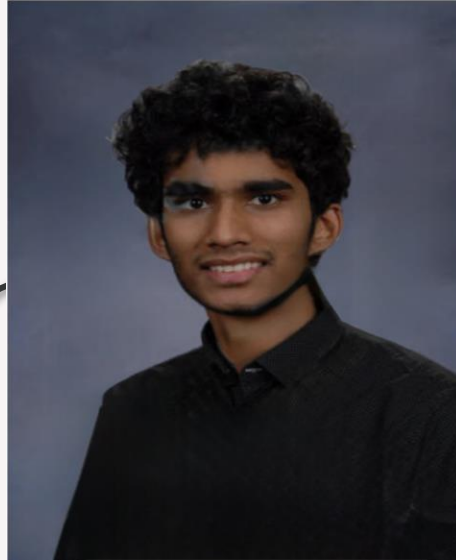
Community partners: Jude Higdon, Carlos Alvarez, Tyrone Bass

Meet the team!

Ritik Jain

Major: Data Science, College of Natural Science

Ritin Kalidindi

Major: Data Science, College of Natural Science

Naamna Modi

Major: Computational Data Science, College of Engineering

Gabriella Stickney

Major: Computational Data Science, College of Engineering

The QSIDE Institute

Also known as, the Institute of Quantitative Study of Inclusion, Diversity, and Equity

Established as a **501(c)(3)** nonprofit in 2019

Focus areas include education equity, diversity & inclusion in arts/media, criminal justice, environmental justice, health equity, human trafficking, and more

QSIDE strives to use data science and mathematical modeling to address social justice issues
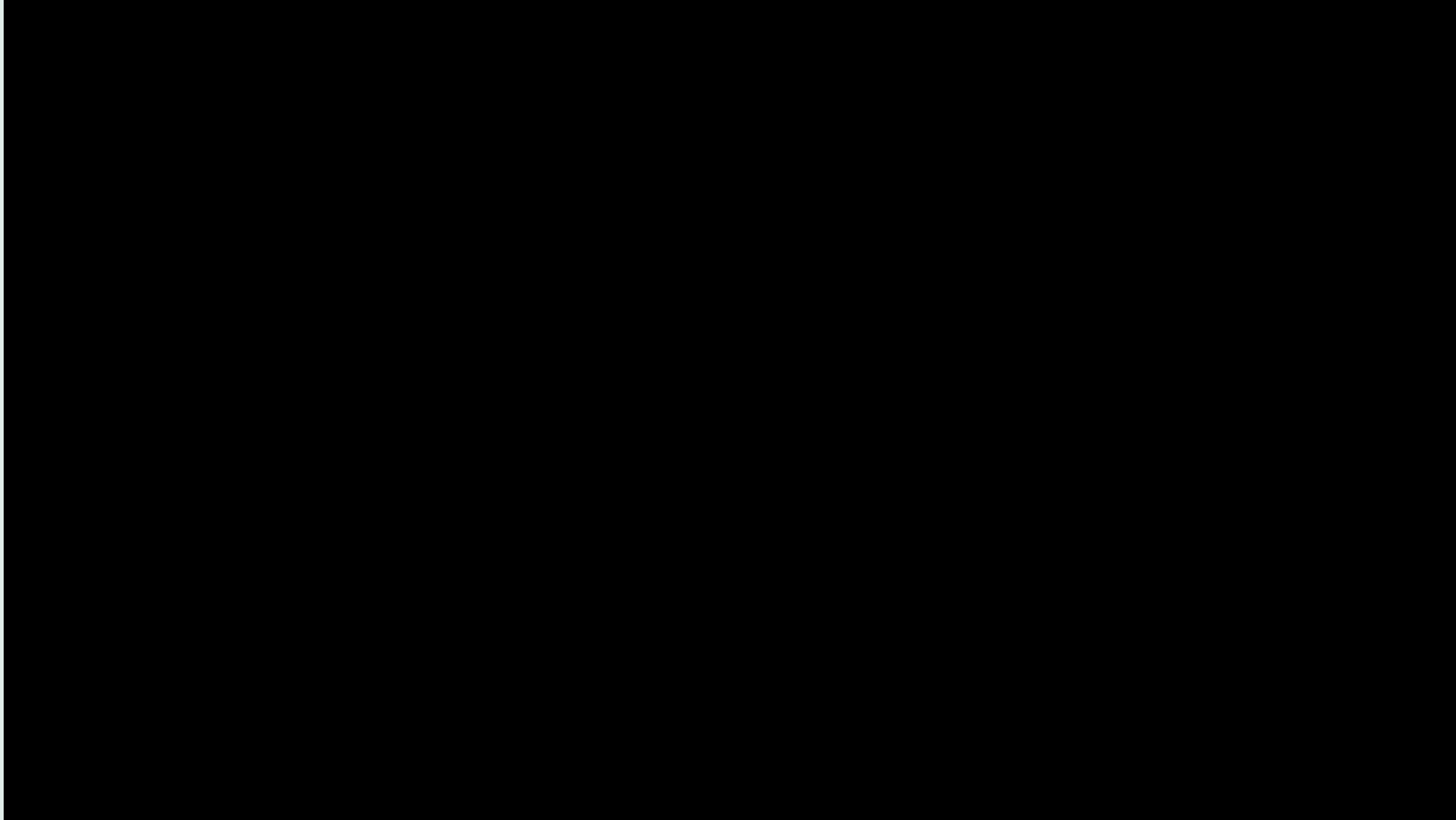
Investigate patterns and causes of decreased student presence in schools
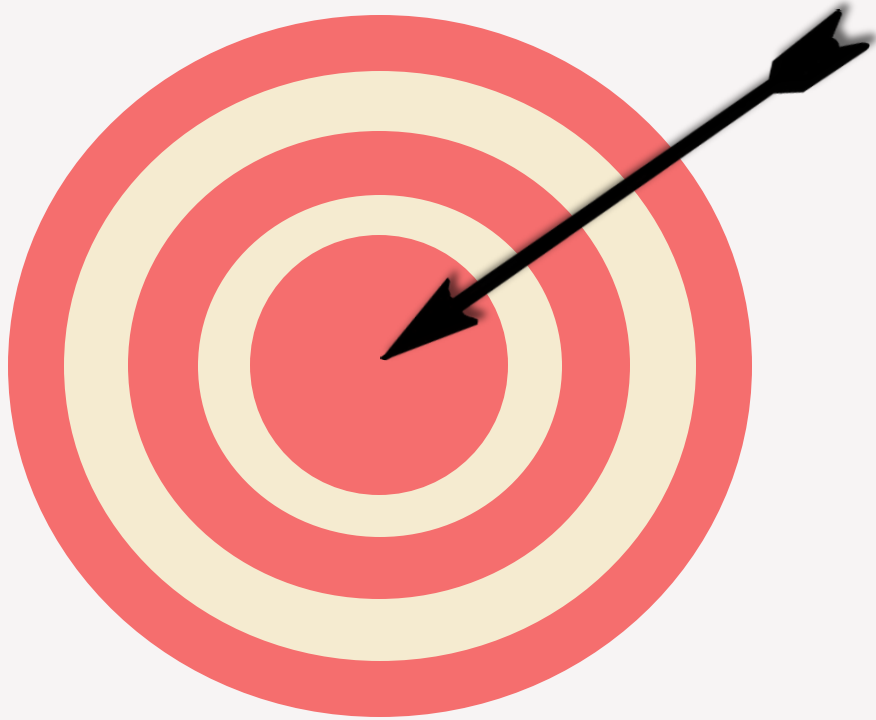
What is Chronic Absenteeism?

Chronic Absenteeism

Citation: https://www.youtube.com/watch?v=hiLFESy3EWo

https://www.attendanceworks.org/chronic-absence/the-problem/

Attributes Related to Chronic Absenteeism

- Learning gaps
- Economic hardship
  - o Widens inequalities
- Health related absences
- Safety of Commute
- Disengagement from school

Goals

#1: Trends

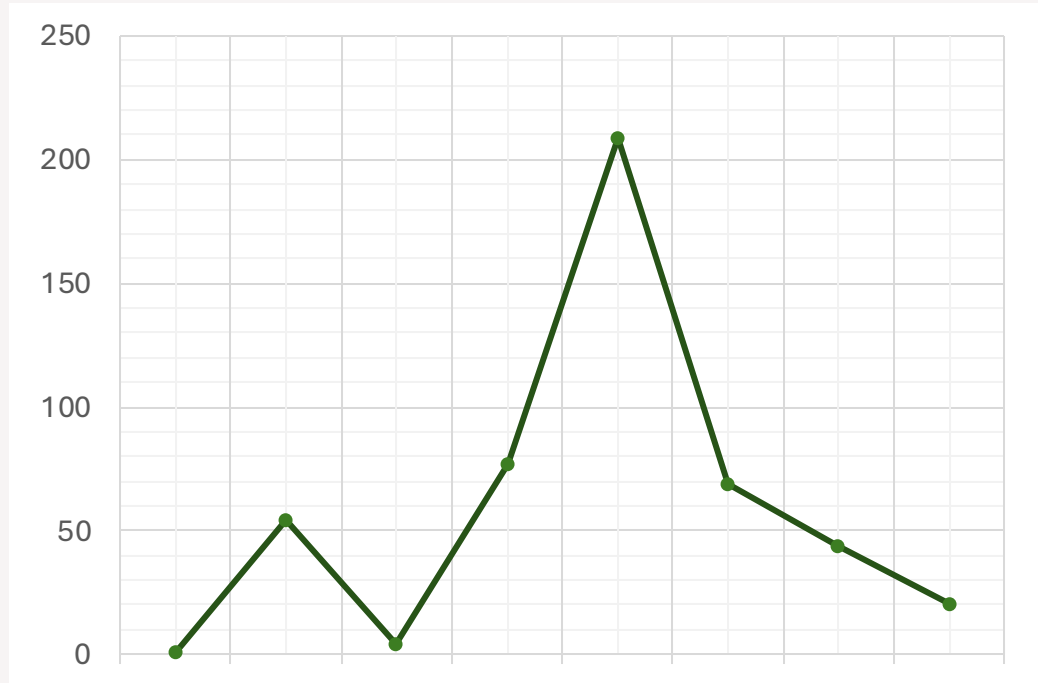Establish trends between chronic absenteeism and crime rates

#2: Visualizations

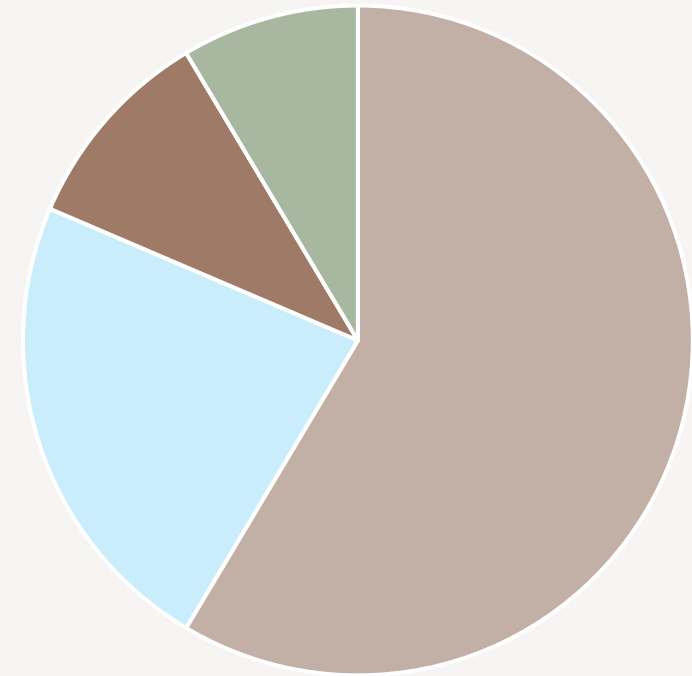Create data visualizations that show these trends

#3: Create Data Map

Create a data map with various sources of relevant data

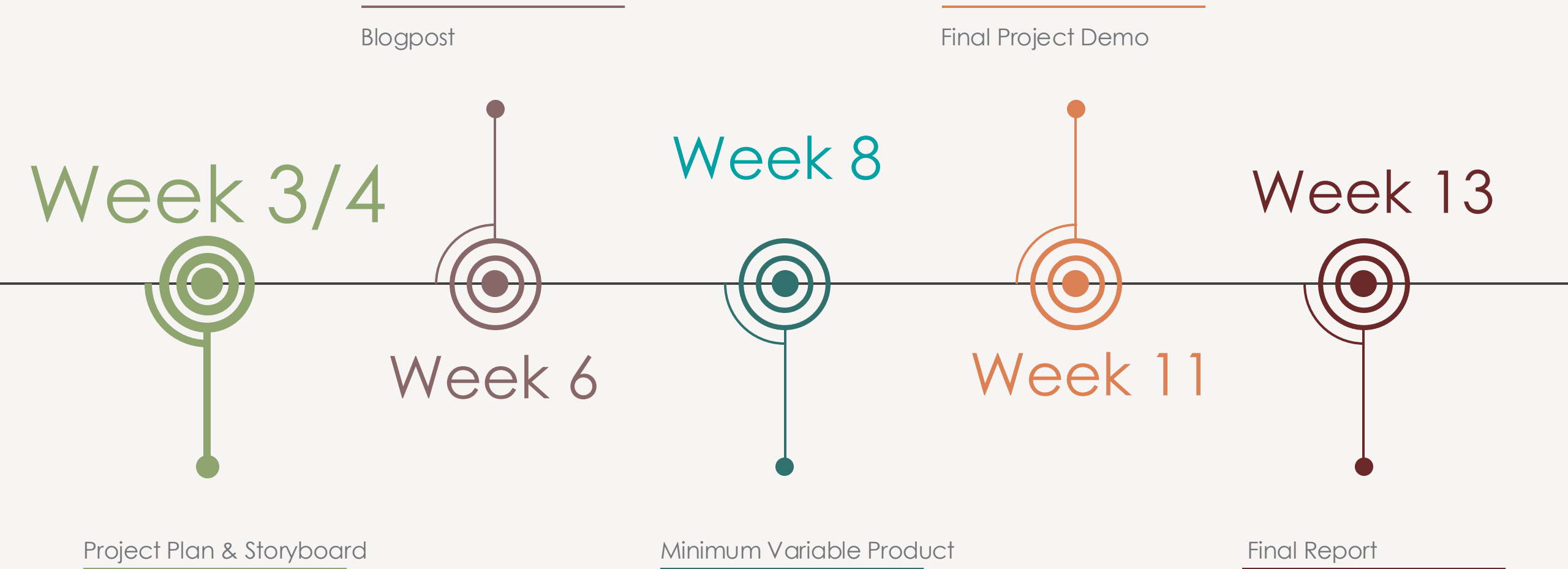# Questions we want to answer

How does the rate of chronic absenteeism correlate to crime rate in each community?
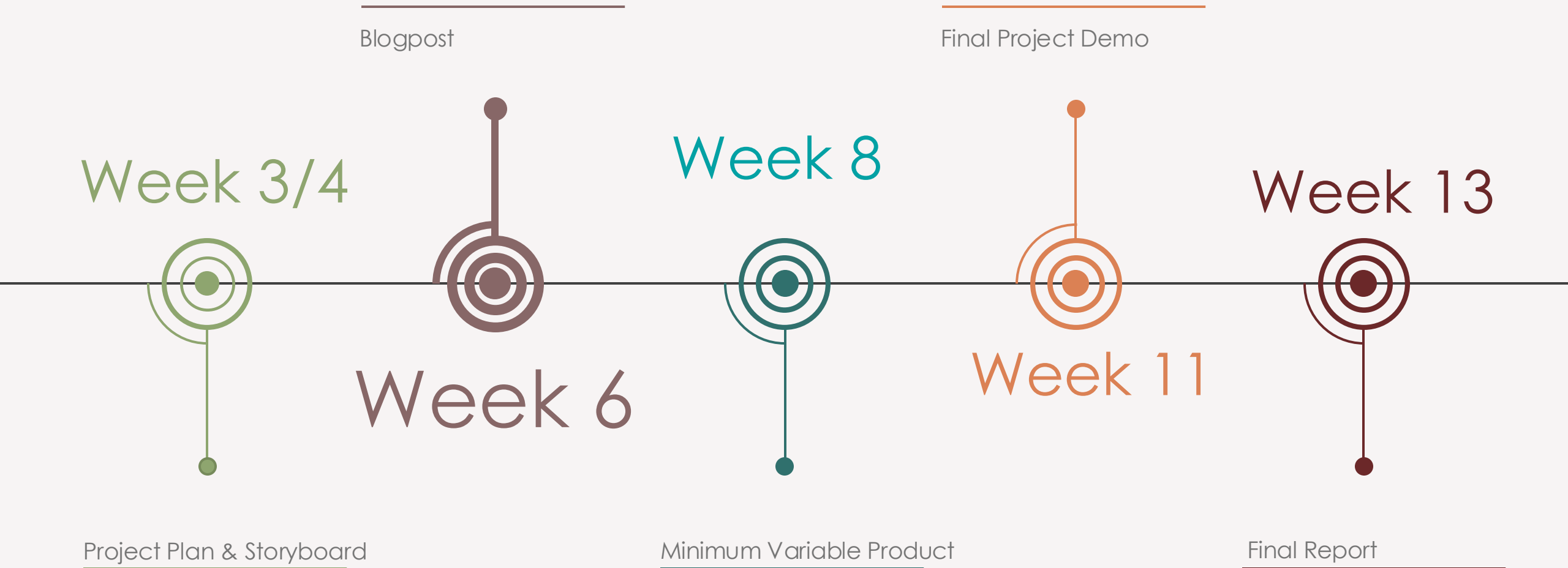

In which communities are the rates of chronic absenteeism the lowest?

TIMELINE

Blogpost

Final Project Demo

Week 3/4

Week 8

Week 13

Week 6

Week 11

Project Plan & Storyboard

Minimum Variable Product

Final Report

TIMELINE

Blogpost

Final Project Demo

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Final Report
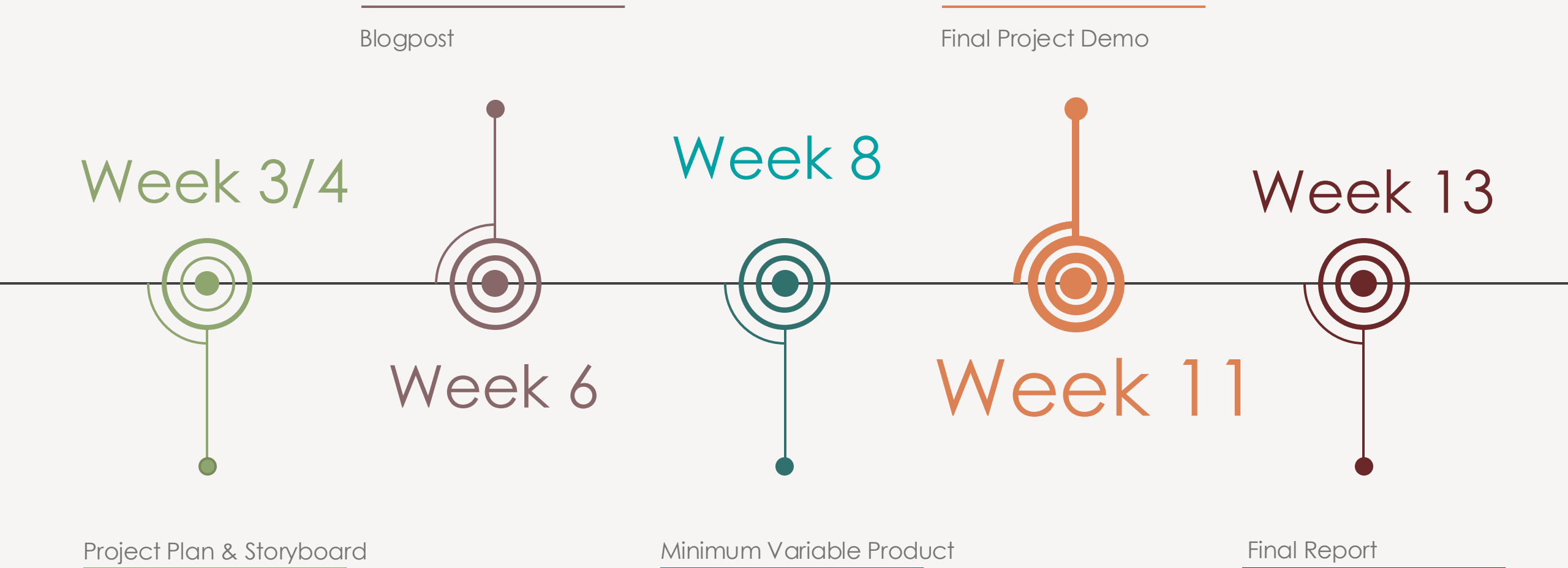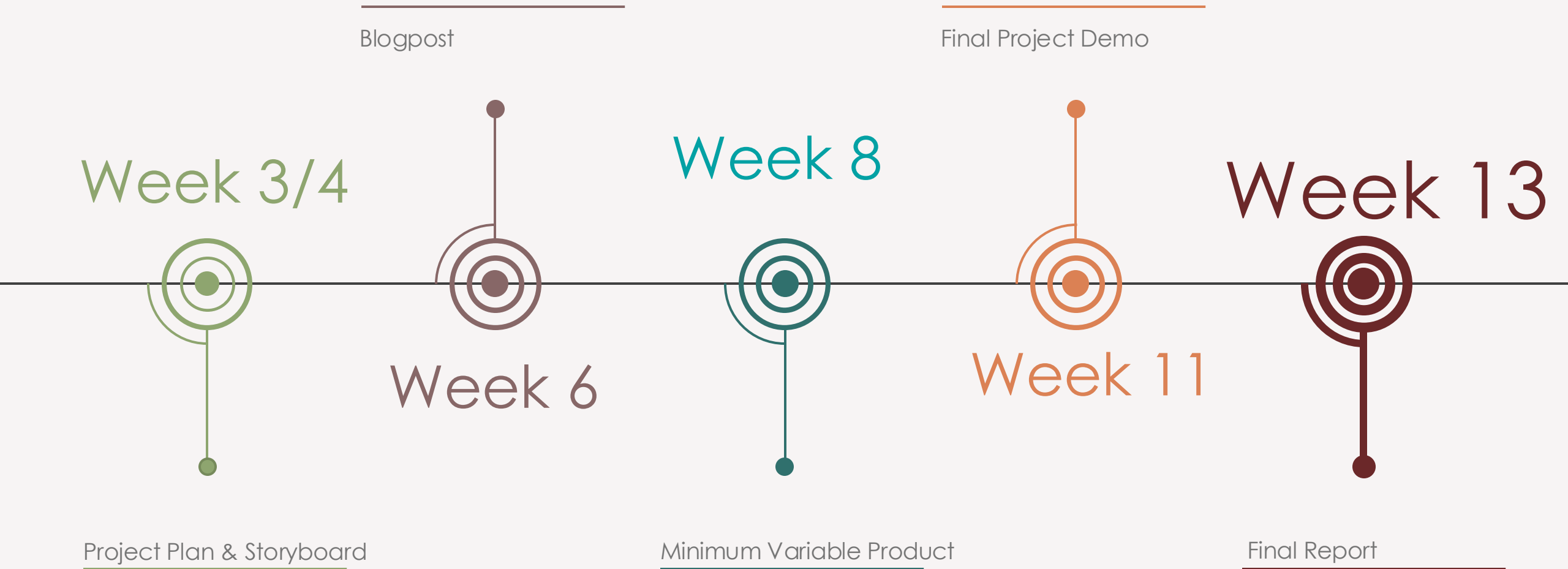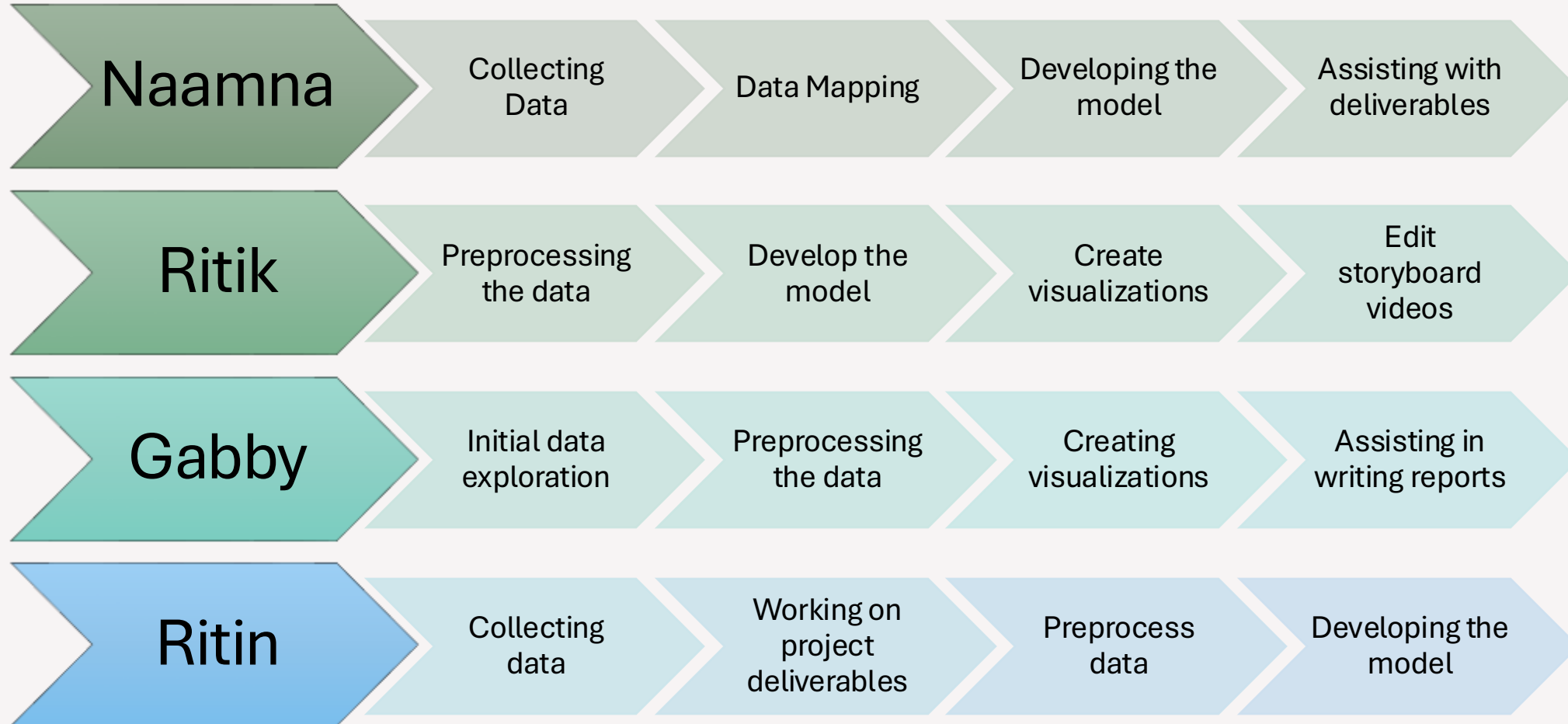
Open Loops

- Creating the community health index
- Exploring the relationship between chronic absenteeism and various variables
- Finding relevant open-source data sets
- Reviewing and understanding Qside's code regarding the project

Work Breakdown

Naamna → Collecting Data → Data Mapping → Developing the model → Assisting with deliverables

Ritik → Preprocessing the data → Develop the model → Create visualizations → Edit storyboard videos

Gabby → Initial data exploration → Preprocessing the data → Creating visualizations → Assisting in writing reports

Ritin → Collecting data → Working on project deliverables → Preprocess data → Developing the model

Expected successful outcomes

- Creating a functioning Community health index
- Sourcing at least **one local dataset** per key indicator
- Balanced, well performing model
- Having a user adoption rate of at least **50%**
- Scoring a **4 out of 5** in the usability tests
- Provide insights using sourced data
- Produce quality visualizations for stakeholders and community partners
- Produce a well written final report

Thank you!