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## sexualhealth.nyc — Project Specification

### The Problem

If you need sexual health services in NYC — STI testing, PrEP, abortion care, contraception — there’s no single place to find what’s available. You have to check:

- NYC Health Department’s site (only lists their 6 clinics)
- Planned Parenthood’s finder (only their locations)
- HIV.gov locator (only HIV-related services)
- Individual clinic websites

None of these answer the questions people actually have:

- “Can I walk in or do I need an appointment?”
- “Do they take my insurance?”
- “Can I go without insurance?”
- “What’s the closest clinic to my subway stop?”
- “Are they LGBTQ+ friendly?”

**Our solution:** One interactive map with every sexual health clinic in NYC, with filters for all the things that actually matter.

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### What’s Already Set Up

What	Status	Details
Website domain	[Done] Done	sexualhealth.nyc (also sexualhealthnyc.com redirects here)
Email	[Done] Done	hello@sexualhealth.nyc — check via mail.zoho.com
Placeholder site	[Done] Done	Live at sexualhealth.nyc (just a “coming soon” page)
Analytics	[Done] Done	Stats at sexualhealthnyc.goatcounter.com
Map tool	[Pending] Not started	Will use ArcGIS via NYU license
Clinic data	[Pending] Not started	The main work — see below

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### What We’re Building

The site has two parts:

**1. The map (the main thing)** An interactive map where users can:

- See all clinics as pins on a map
- Filter by services (STI testing, PrEP, abortion, etc.)
- Filter by insurance (Medicaid, uninsured, etc.)
- Filter by walk-in vs. appointment
- Click a clinic to see details (hours, phone, address)
- Get transit directions

**2. Static pages (the wrapper)** Simple pages around the map:

- Homepage with the embedded map

- About page (who made this, methodology)
- Resources page (hotlines, other links)
- Contact page (submit corrections)

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## The Data: What We’re Collecting

For each clinic, we need to collect specific information. Here’s every field and why it matters:

### Basic Info

Field	Example	Why we need it
Clinic name	“Callen-Lorde Community Health Center”	Obviously
Address	“356 W 18th St, New York, NY 10011”	For the map location and directions
Borough	“Manhattan”	Lets people filter to their borough
Phone number	“(212) 271-7200”	So people can call
Website	“callen-lorde.org”	So people can learn more

### Services Offered

This is the most important filtering. We need to know if each clinic offers:

Service	Why it matters
STI testing	The most common reason people search
HIV testing	Often bundled with STI but not always
PrEP	HIV prevention pill — not everywhere offers it
PEP	Emergency HIV prevention — time-sensitive, people need to find it fast
Contraception	Birth control
Abortion	Increasingly hard to find accurate info
Gender-affirming care	Hormones, etc. — LGBTQ+ community needs this
Vaccines	HPV, Hepatitis, etc.

### Insurance & Cost

The #1 barrier to care is “can I afford this?” We need:

Field	Why it matters
Accepts Medicaid	Huge — many low-income NYers have Medicaid
Accepts Medicare	For older adults
Accepts private insurance	And ideally which ones
Sliding scale available	Reduced cost based on income
Can be seen without insurance	Critical for uninsured people

**The Medicaid nuance:** In NYC, “Medicaid” isn’t one thing. There’s:

- **Straight Medicaid** — direct government coverage
- **Managed Medicaid** — through an MCO like Healthfirst, Fidelis, MetroPlus, etc.

Some clinics accept one but not the other. This is the difference between getting care and getting turned away. If clinic websites list specific MCOs, we'll capture them. If they just say "we accept Medicaid," we'll note it's unverified.

**Verification status:** For insurance especially, we'll track confidence:

- "Confirmed" — verified on website or by phone
- "Listed on website" — site says so but we didn't verify
- "Unknown" — website doesn't say

## Access & Availability

Field	Why it matters
Walk-ins accepted	Can you just show up?
Appointment required	Or do you need to call ahead?
Hours	When are they open?
Languages spoken	NYC is multilingual

## Special Populations

Some clinics specialize in serving specific communities:

Field	Why it matters
LGBTQ+ focused	Some clinics specialize in this (Callen-Lorde, GMHC)
Youth-friendly	Teens can go without parental consent
Anonymous testing available	Some people need this for safety reasons

## Transit

NYC runs on public transit. We'll calculate:

Field	Example
Nearest subway	"A/C/E at 14th St (0.2 mi)"
Nearest bus	"M14A, M14D (0.1 mi)"

## Metadata

For maintenance:

Field	Why
Last verified date	So we know how stale the data might be
Data sources	Where did we get this info from?
Notes	Anything special (temporary closures, express testing, etc.)

## Where the Data Comes From

We're pulling from multiple sources and combining them. Think of it like assembling a puzzle from different boxes.

## Official Government Data

Source	What we get	Reliability
NYC Open Data	Health facility locations and addresses	High — but limited detail
HRSA (federal)	Federally Qualified Health Centers	High — but only FQHCs
NYC Health Dept website	Their 6 sexual health clinics	High — but only 6 locations

## Provider Websites (We Have to Scrape)

These don't have APIs — we have to visit their websites and extract the info:

Organization	# of Locations	What they offer
Planned Parenthood NYC	~10	Full range of services
Callen-Lorde	4	LGBTQ+ focused
GMHC	1	HIV/AIDS focused
Community Healthcare Network	~14	Community health centers
The Door	1	Youth focused
Mount Sinai Adolescent Health	1	Youth focused

## What “Scraping” Means

We write code that visits each clinic's website and extracts the information (hours, services, insurance) from their pages. It's like copying info from a website, but automated.

The tricky part: every website is different. Planned Parenthood's site is structured differently than Callen-Lorde's. We have to handle each one.

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## Verifying Data by Phone (Your Team)

Website scraping gets us 60-70% of the way there. The rest requires phone calls. This is where you come in.

### Why Calls Matter

- Many clinics don't list insurance info on their website
- Hours on websites are often outdated
- “Walk-ins welcome” might have changed post-COVID
- Some details (like specific Medicaid MCOs) are never on websites

### Organizing Volunteers

You can recruit friends, classmates, or club members to help. Each person gets a list of clinics to call.

#### The pitch to volunteers:

“We're building a free resource to help NYers find sexual health services. Can you spend an hour calling 10 clinics to verify their info?”

#### What to ask on each call:

1. “I'm calling from sexualhealth.nyc — we're building a free directory of sexual health clinics in NYC. Can I verify a few details about your services?”
2. Hours of operation
3. Do you accept walk-ins?
4. What insurance do you accept? (Specifically: Medicaid? Which plans?)

5. Can someone be seen without insurance?
6. Do you offer [STI testing / PrEP / etc.]?

## Prioritizing Calls

Not all clinics are equally important to call. Prioritize by:

1. **Missing critical data** — no insurance info, no hours
2. **High-traffic clinics** — Planned Parenthood, DOH clinics
3. **Unverified data** — info scraped from old websites
4. **Stale data** — last verified 6+ months ago

We'll generate a spreadsheet sorted by priority for volunteers to work through.

## Calls as Outreach

Every call is also marketing. When you call, you're:

- **Introducing the site** — “We're sexualhealth.nyc, a free clinic finder”
- **Building relationships** — They may refer patients to the site
- **Creating accountability** — If they know they're listed, they may notify us of changes
- **Getting buy-in** — Some clinics may want to help keep their info current

## Ask at the end of each call:

“If your hours or services change, is there someone we can contact to update our listing? Can I get an email?”

This creates a contact list for future updates — way better than re-scraping outdated websites.

## Tracking Call Results

Simple spreadsheet: | Clinic | Caller | Date | Verified? | Notes | Contact for updates | |———|———|———|———|

We'll set this up in Google Sheets so multiple people can work on it.

## What We Won't Know Until We Start

Some things we can only figure out by doing the work:

### Data Quality Issues

- **Outdated websites:** Some clinics haven't updated their sites in years. The hours might be wrong.
- **Inconsistent info:** One page says “walk-ins welcome” but another says “by appointment only.”
- **Missing info:** Many sites don't list what insurance they accept.
- **Vague language:** “We accept most insurance” — what does that mean?

### Scope Questions

- **What counts as a “sexual health clinic”?**
  - Narrow definition (only specialized clinics): ~30-50 locations
  - Broad definition (any clinic offering STI testing): ~150-200 locations
  - We'll need to decide as we go
- **How do we handle hospitals?**
  - Mount Sinai has an STI clinic, but it's inside a giant hospital
  - Do we list the hospital or try to find the specific clinic?
- **Telehealth?**

- Some services are now available online
- Do we include them? They don't have a "location"

### Verification Challenges

- **Closed permanently:** Some clinics from old databases may have shut down
- **Moved:** Addresses may be outdated
- **Changed services:** A clinic might have stopped offering abortion care

**Our approach:** Start scraping, document issues as we find them, and make decisions together.

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## Keeping the Data Updated (Your Job)

After launch, the clinic info will slowly go out of date. Hours change, clinics close, new ones open. Here's how we'll handle it:

### How Users Report Issues

The site will have a "Report an error" form. When someone submits a correction:

1. You'll get an email notification
2. Submissions also appear in the Netlify dashboard
3. You verify the info (check the clinic's website, or call them)
4. You update the data in ArcGIS (see instructions below)
5. Optionally reply to thank them

### How to Update the Data

ArcGIS has a spreadsheet-like interface. To update a clinic:

1. Log into ArcGIS Online (I'll set up your account)
2. Find the clinic data layer
3. Click "Data" tab — you'll see all clinics in a table
4. Find the row and edit the cell
5. Save

For adding a new clinic or deleting one, same interface but use the Add/Delete buttons.

### How Often to Check

Suggested routine:

- **Weekly:** Check for user submissions, handle any corrections
- **Monthly:** Spot-check 5-10 random clinics (visit their websites, make sure hours are still accurate)
- **Quarterly:** Consider re-running the scraper to catch bulk changes

### Dealing with Uncertainty

When you're not sure if info is correct:

- Check the clinic's website first
  - If website is unclear, call them (most clinics have reception)
  - If you can't verify, add a note like "Hours unverified as of [date]"
-

## What Success Looks Like

### Minimum Viable Product (MVP)

- ☐ Map with 50+ clinics
- ☐ Filters for: services, insurance, walk-in
- ☐ Each clinic shows: name, address, phone, hours
- ☐ Transit info for each clinic
- ☐ Mobile-friendly
- ☐ “Report an error” form works

### Nice to Have

- ☐ 100+ clinics
- ☐ All data fields populated
- ☐ Clinic detail pages (for SEO)

### Measuring Success

- **Analytics:** How many people visit? (GoatCounter)
- **Engagement:** How many filter/interact with the map? (ArcGIS stats)
- **Feedback:** What do users say? (form submissions, emails)
- **Sharing:** Does it get shared on social media, by orgs?

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## Technical Implementation Details

*Everything below is implementation detail — you don’t need to read this unless you’re curious about how the technical side works.*

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### Architecture

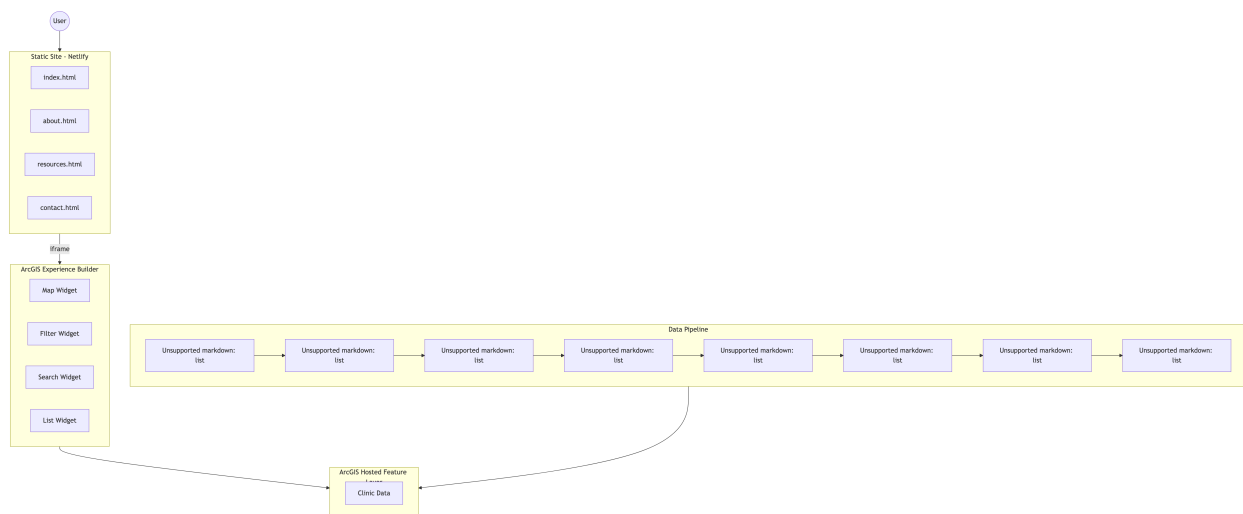


Figure 1: Architecture Diagram



## URLs:

- Static site: [sexualhealth.nyc](https://sexualhealth.nyc) (Netlify)
- ArcGIS app: [experience.arcgis.com/...](https://experience.arcgis.com/) (hosted by Esri via NYU license)

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## Data Schema (Technical)

Field	Type	Notes
name	string	Clinic name
address	string	Full street address
borough	string	Manhattan, Brooklyn, Queens, Bronx, Staten Island
latitude	float	WGS84
longitude	float	WGS84
bbl	string	Borough-Block-Lot (NYC property ID, used for deduplication)
phone	string	Primary contact (E.164 format, used as dedup key)
website	string	Clinic URL
clinic_type	string	DOH, Planned Parenthood, FQHC, LGBTQ+ Center, Hospital, Private
services	string	Comma-separated list
has_sti_testing	boolean	Filter flag
has_hiv_testing	boolean	Filter flag
has_prep	boolean	Filter flag
has_pep	boolean	Filter flag
has_contraception	boolean	Filter flag
has_abortion	boolean	Filter flag
has_gender_affirming	boolean	Filter flag
has_vaccines	boolean	Filter flag
insurance_types	string	Comma-separated list
accepts_medicaid	boolean	Filter flag
medicaid_mcos	string	Specific MCOs if known (Healthfirst, Fidelis, MetroPlus, etc.)
accepts_medicare	boolean	Filter flag
sliding_scale	boolean	Reduced cost based on income
no_insurance_ok	boolean	Filter flag
insurance_verified	string	“confirmed”, “listed”, or “unknown”
hours	string	Human-readable
walk_in	boolean	Walk-ins accepted?
appointment_only	boolean	Appointment required?
languages	string	Comma-separated
lgbtq_focused	boolean	
youth_friendly	boolean	
anonymous_testing	boolean	
nearest_subway	string	e.g., “A/C/E at 14th St (0.2 mi)”
nearest_bus	string	e.g., “M14A, M14D (0.1 mi)”
last_verified	date	
verified_by	string	“phone”, “website”, or “government_data”
data_sources	string	Where info came from
update_contact_email	string	Clinic contact for future updates (from phone outreach)
notes	string	Special info

## Data Pipeline

### Geocoding: NYC Planning Labs GeoSearch

We use NYC's official geocoder instead of Google or Nominatim because it:

- Returns BBL (Borough-Block-Lot) — immutable NYC property ID, perfect for deduplication
- Handles NYC borough logic correctly (“New York, NY” = Manhattan, not Queens)
- Returns official standardized addresses
- Free, no API key needed

Endpoint: `https://geosearch.planninglabs.nyc/v2/search?text={address}`

See `pipeline/geocoder.py` for implementation.

### LLM Extraction

For scraping clinic websites, we use Claude API to extract structured data from HTML:

Given this HTML from a clinic website, extract:

- Services offered (list)
- Insurance types accepted (list)
- Whether insurance is required (yes/no)
- Hours of operation
- Walk-in or appointment required
- Languages spoken

Flag any information that appears outdated (references to past years, old COVID policies, etc.)

Return as JSON.

HTML:

```
{html_snippet}
```

### Deduplication Strategy

Same clinic may appear in multiple sources with different names/addresses.

**Step 0: Phone number matching (primary key)** Phone numbers are more reliable than addresses in NYC (vertical stacking of businesses). Normalize to E.164 format and match first.

**Step 1: BBL matching** If two records have the same BBL (Borough-Block-Lot), they're at the same property.

**Step 2: Fuzzy name matching within geographic clusters** Group records within 50 meters, then fuzzy match names:

- Score > 85 = auto-merge
- Score 60-85 = flag for manual review
- Score < 60 = probably different clinics at same address

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## Static Site

### Structure

```
public/  
  index.html      # Full-width embedded ArcGIS map  
  about.html      # Project background, methodology  
  resources.html  # Additional resources, hotlines
```

```
contact.html      # Submit corrections form
_headers          # Security headers
```

## Accessibility (WCAG 2.1 AA)

The static site wrapper must meet WCAG 2.1 AA:

- Semantic HTML with proper heading hierarchy
- Keyboard navigation
- Color contrast 4.5:1 minimum
- Skip links
- Alt text on images

**ArcGIS accessibility:** Maps are challenging for screen readers. We configure:

- Full-screen layouts (not free-form)
- Auto-calculate tab orders
- Accessible labels on all widgets
- High-contrast themes
- List view alongside map for non-visual access

## Security Headers

public/\_headers:

```
/*
Content-Security-Policy: default-src 'self'; frame-src https://experience.arcgis.com https://*.arcgis
X-Frame-Options: DENY
X-Content-Type-Options: nosniff
Referrer-Policy: strict-origin-when-cross-origin
```

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## Community Submissions

### Netlify Forms (Preferred)

```
<form name="clinic-update" method="POST" data-netlify="true">
  <input type="hidden" name="form-name" value="clinic-update" />
  <input type="text" name="clinic-name" placeholder="Clinic name" required />
  <textarea
    name="correction"
    placeholder="What needs to be updated?"
    required
  ></textarea>
  <input type="email" name="email" placeholder="Your email (optional)" />
  <button type="submit">Submit</button>
</form>
```

Submissions appear in Netlify dashboard and can trigger email notifications.

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## Email & HIPAA

**Address:** hello@sexualhealth.nyc (Zoho Mail Lite, \$12/year)

**HIPAA note:** This site is a directory, not a healthcare provider. HIPAA doesn't apply to us. However, people may email health questions. Mitigations:

- Auto-reply stating we don't provide medical advice
- Clear disclaimer on contact page
- Don't store health-related emails

#### Required contact page language:

This email is for reporting incorrect clinic information or suggesting additions only. We cannot provide medical advice or answer personal health questions. For health concerns, please contact a clinic directly or call 311.

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## SEO

The ArcGIS iframe is not crawlable by Google. SEO comes from the static wrapper pages.

**Phase 2 improvement:** Generate static HTML pages for each clinic (e.g., `sexualhealth.nyc/clinic/planned-parenthood`) to rank for long-tail searches like “planned parenthood bronx hours.”

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## Analytics

- **GoatCounter:** `sexualhealthnyc.goatcounter.com` (pageviews, referrers, countries)
  - **ArcGIS built-in:** View counts on the map, requests to data layer
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## References

- NYC Open Data API: <https://data.cityofnewyork.us>
- HRSA Data Warehouse: <https://data.hrsa.gov>
- NYC GeoSearch: <https://geosearch.planninglabs.nyc>
- ArcGIS Experience Builder: <https://doc.arcgis.com/en/experience-builder/>
- Netlify: <https://docs.netlify.com>
- GoatCounter: <https://goatcounter.com>