

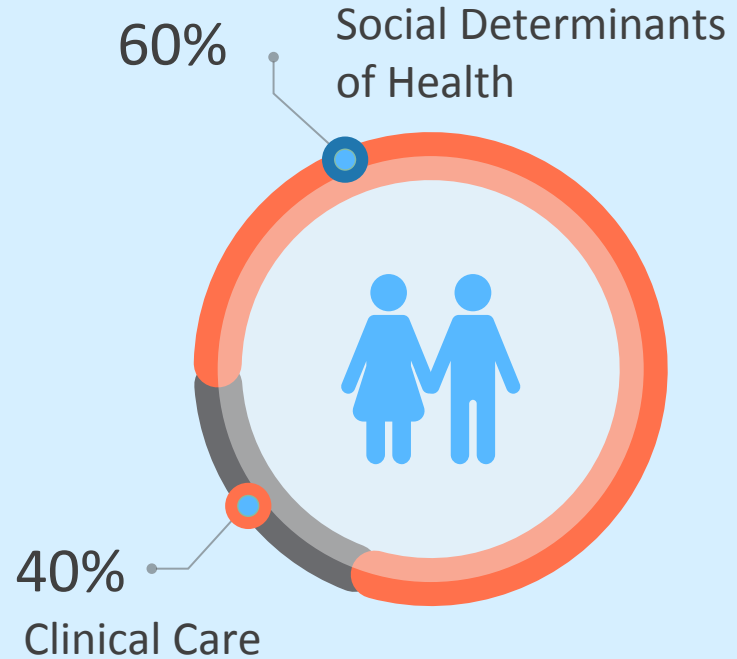


Addressing the Clinical and Social Determinants of Health

Ruben Amarasingham, MD
Founder and CEO
September 24, 2020

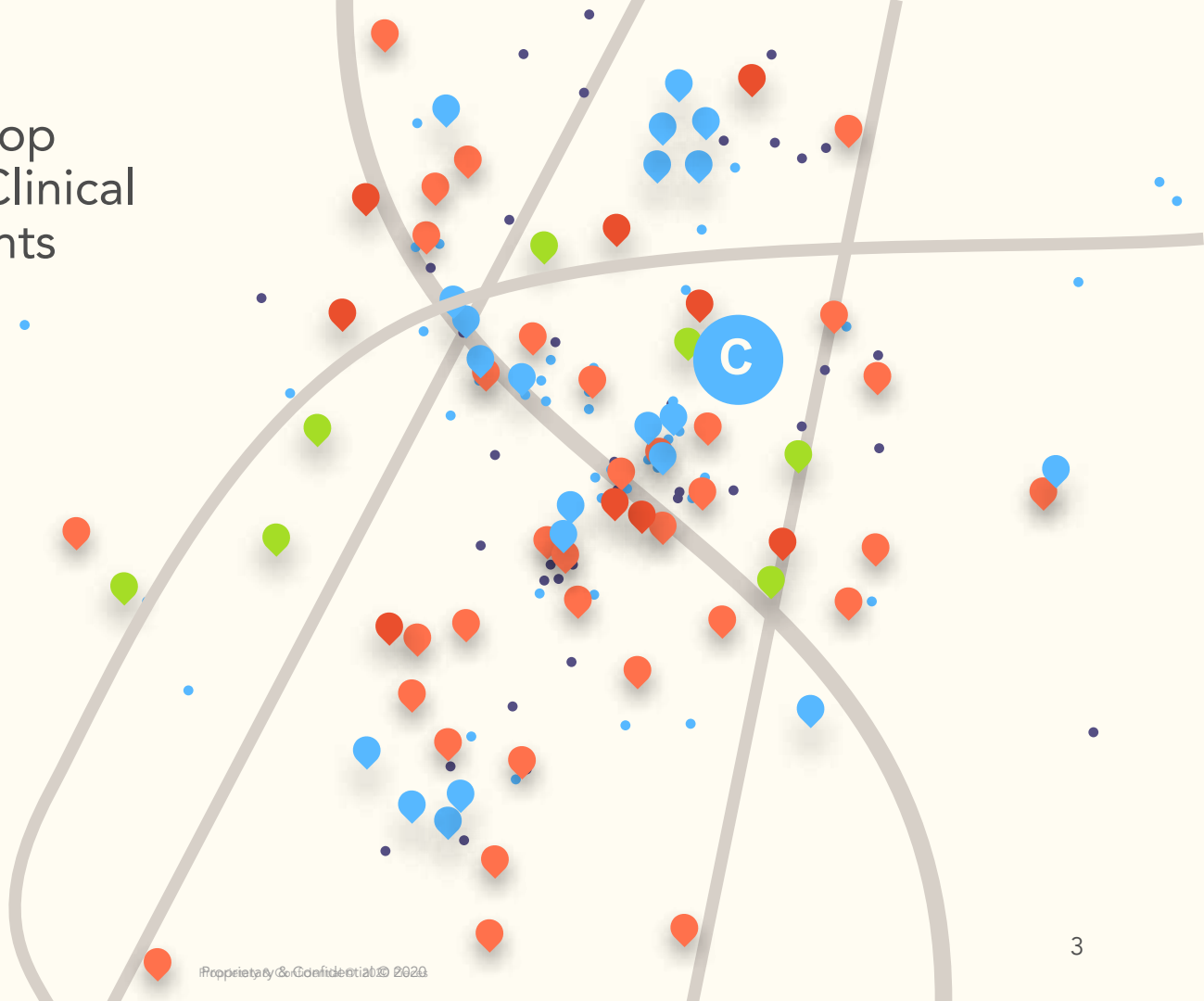
60% of patients' long-term wellness is determined by factors outside the clinic

How do we comprehensively address clinical and social determinants of health?



AI-enabled Closed Loop Network to Address Clinical and Social Determinants

- Family services
- Homeless shelter
- Food bank
- Hospital
- Community colleges
- Health systems clinic





Pieces Predict uses artificial intelligence to predict outcomes so health care providers can intervene early and efficiently.

Pieces Connect connects with and manages those who need community services.





Clinic



Patient presents to clinic



Clinical and social needs surface



Needed interventions flagged



Care team makes referrals



SDoH data is fed back into AI

pieces is continuously monitoring.



Patients' social needs are addressed



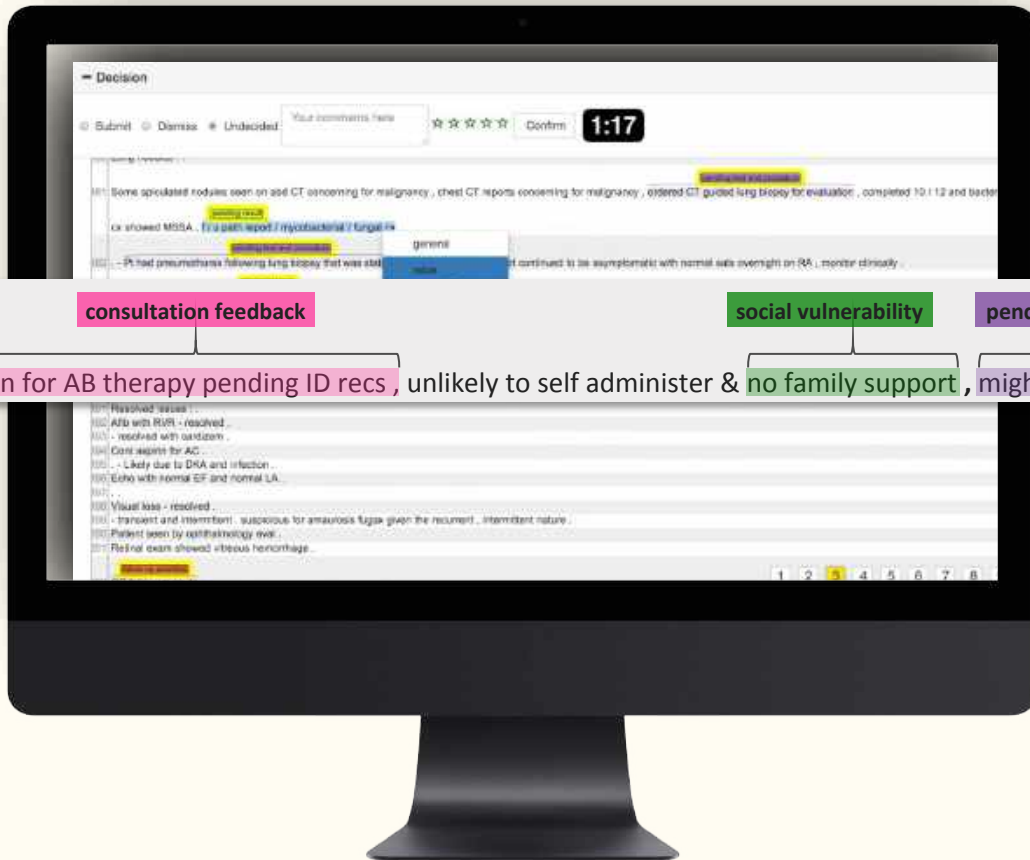
CBO updates patient visit in Pieces Connect



Patient referral received at community-based organization



Community



medication issue

consultation feedback

social vulnerability

pending placement

Dispo: needs IV AB, final plan for AB therapy pending ID recs, unlikely to self administer & no family support, might need SNF, OPAT team following

Pieces Social Determinants of Health Framework

Factors Pieces considers in building SDoH Assessments & Risk Scores



Economic Instability

- Employment
- Food insecurity
- Housing instability
- Financial
- Insurance
- Transportation



Health & Health Care

- Access to Health Care
- Access to Primary Care



Social Isolation

- Civic Participation
- Discrimination
- Incarceration
- Neglect
- Abuse
- Non-accidental trauma (NAT)
- Social Isolation



Education

- Lack of Early Childhood Education
- High School Education
- Higher Education
- Language & Literacy



Neighborhood & Built Neighborhood

- Lack of Food Access
- Secondary Tobacco Exposure
- Crime & Violence
- Housing Quality
- Occupational Hazards

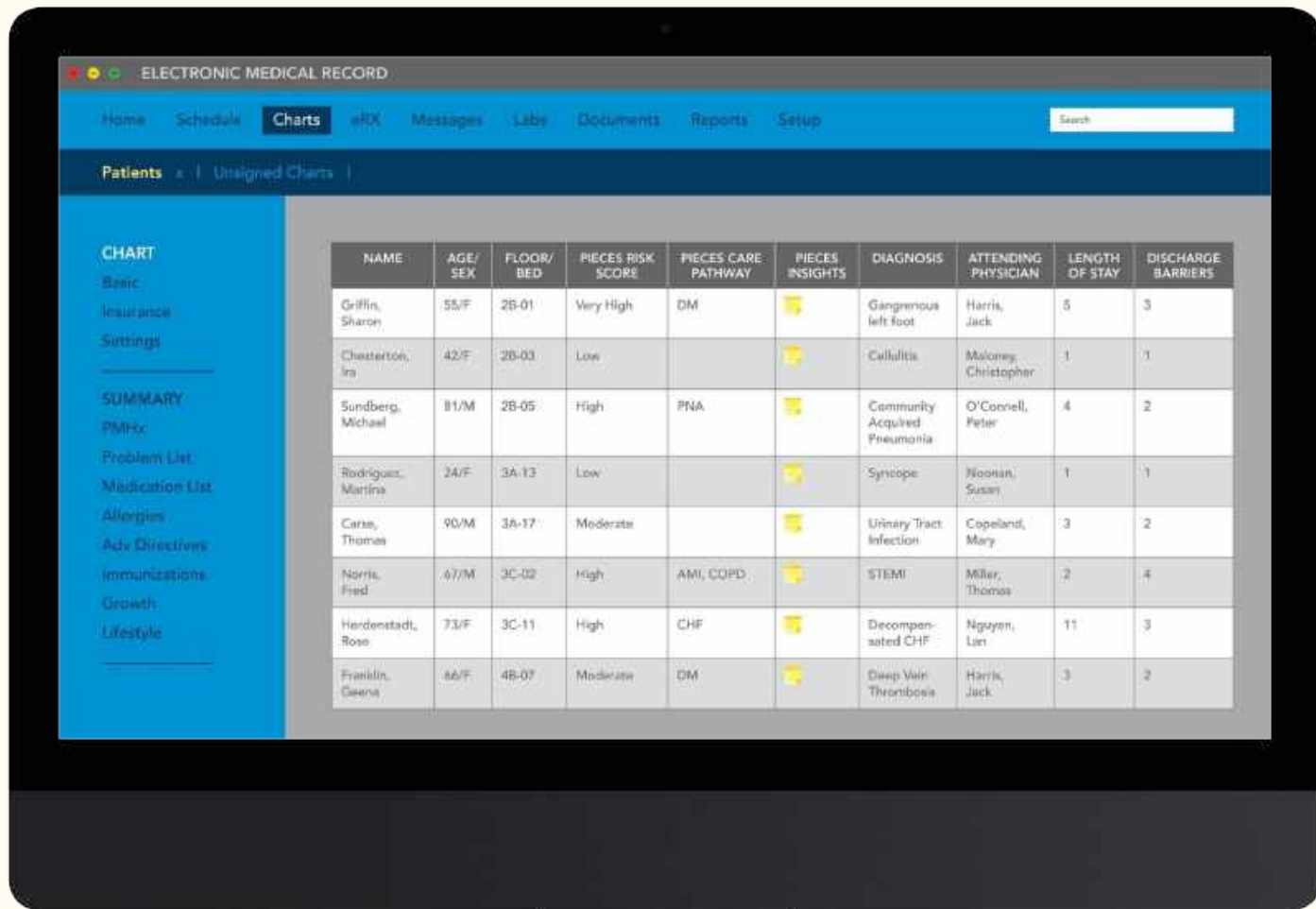


Clinical Drivers

- Substance Misuse
- Behavioral Health Issues
- Disability
- Stress



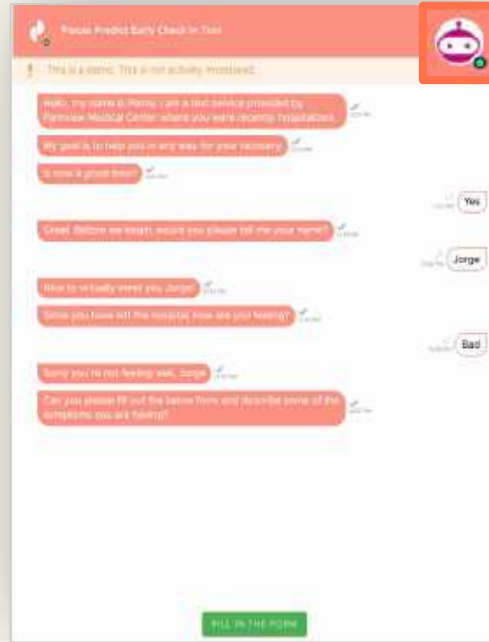
Pieces Integrates with your EHR



Pieces Engagement



Pieces SMS



Pieces ChatBot



Pieces API



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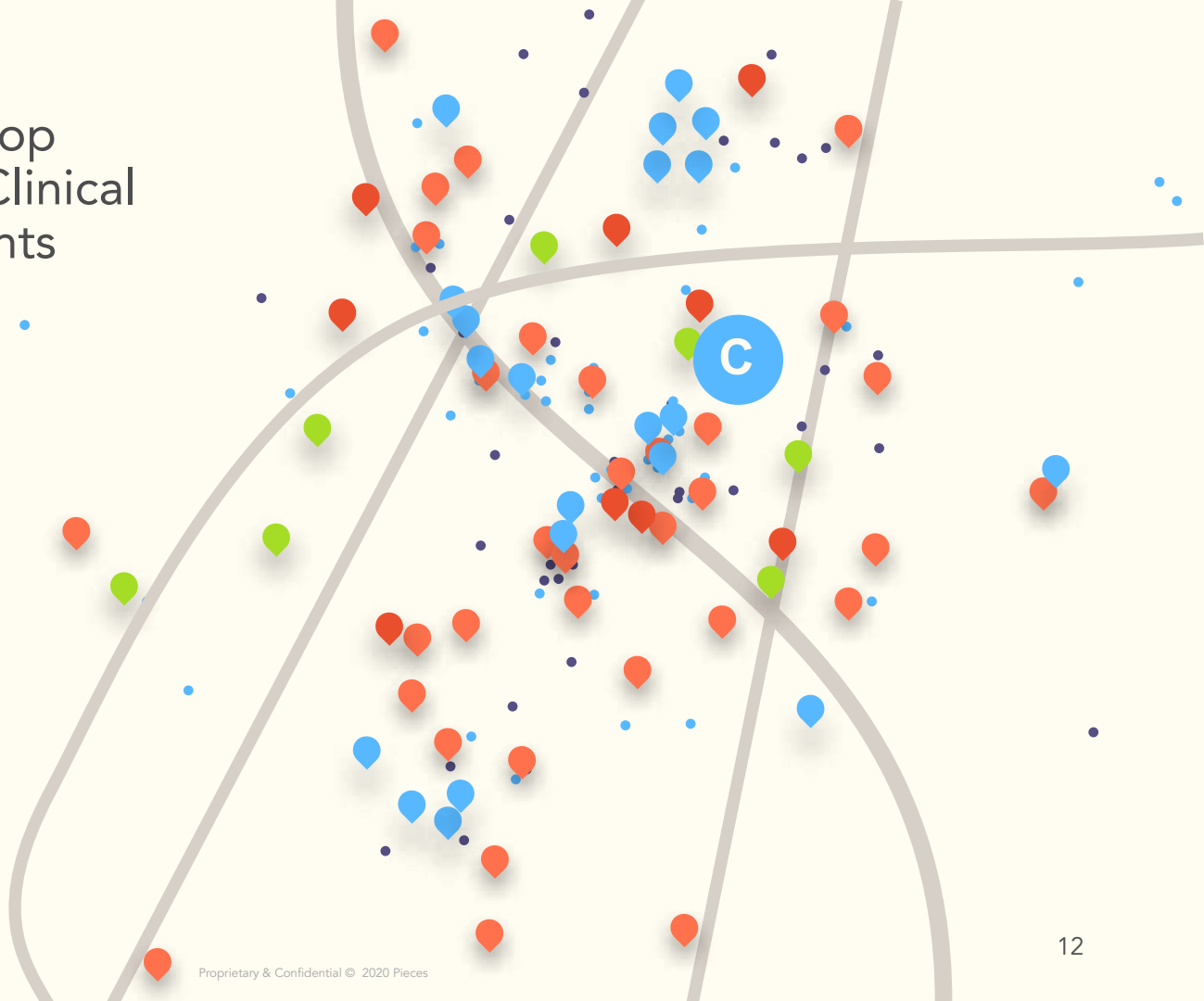
Community

Who We Work With



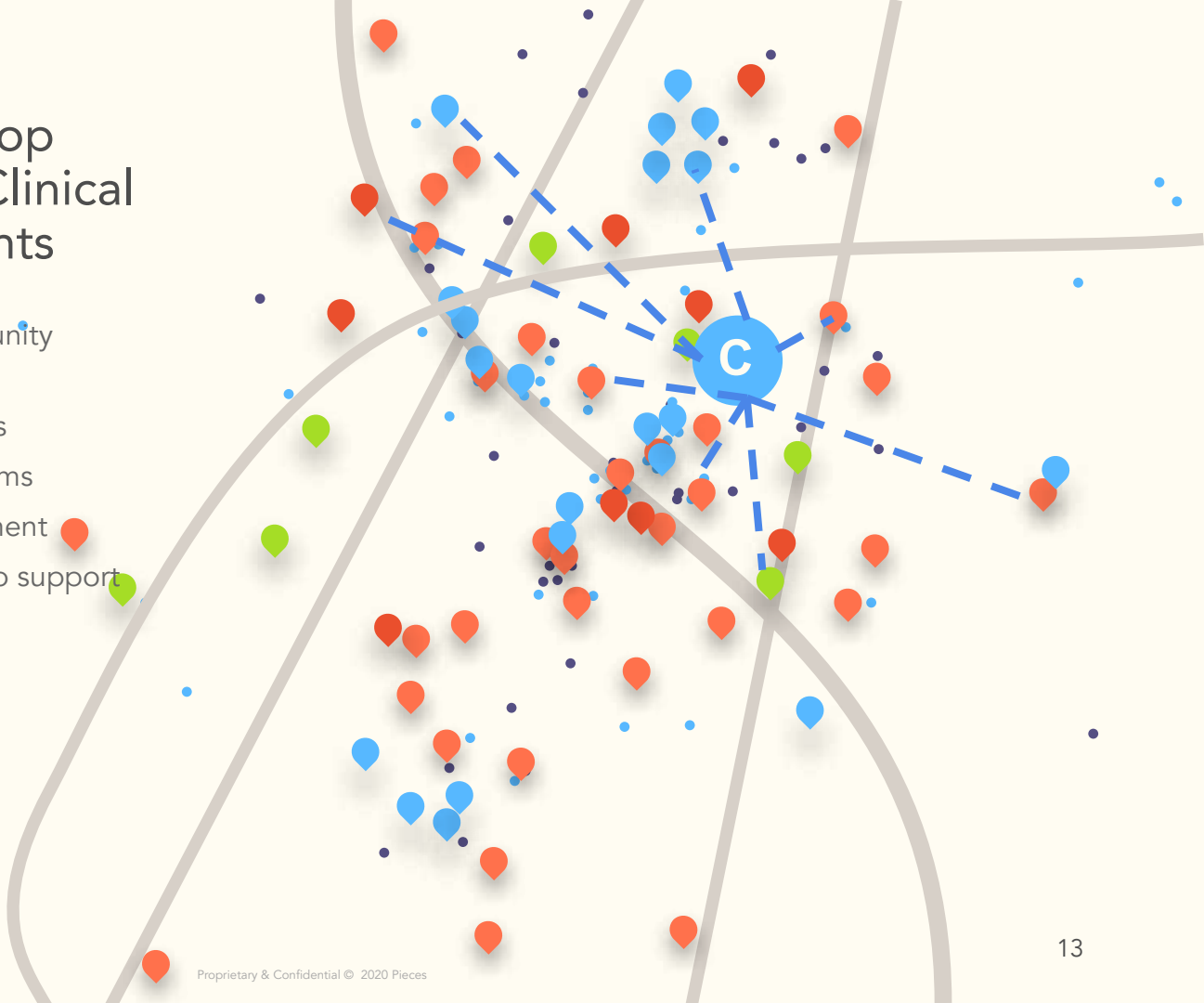
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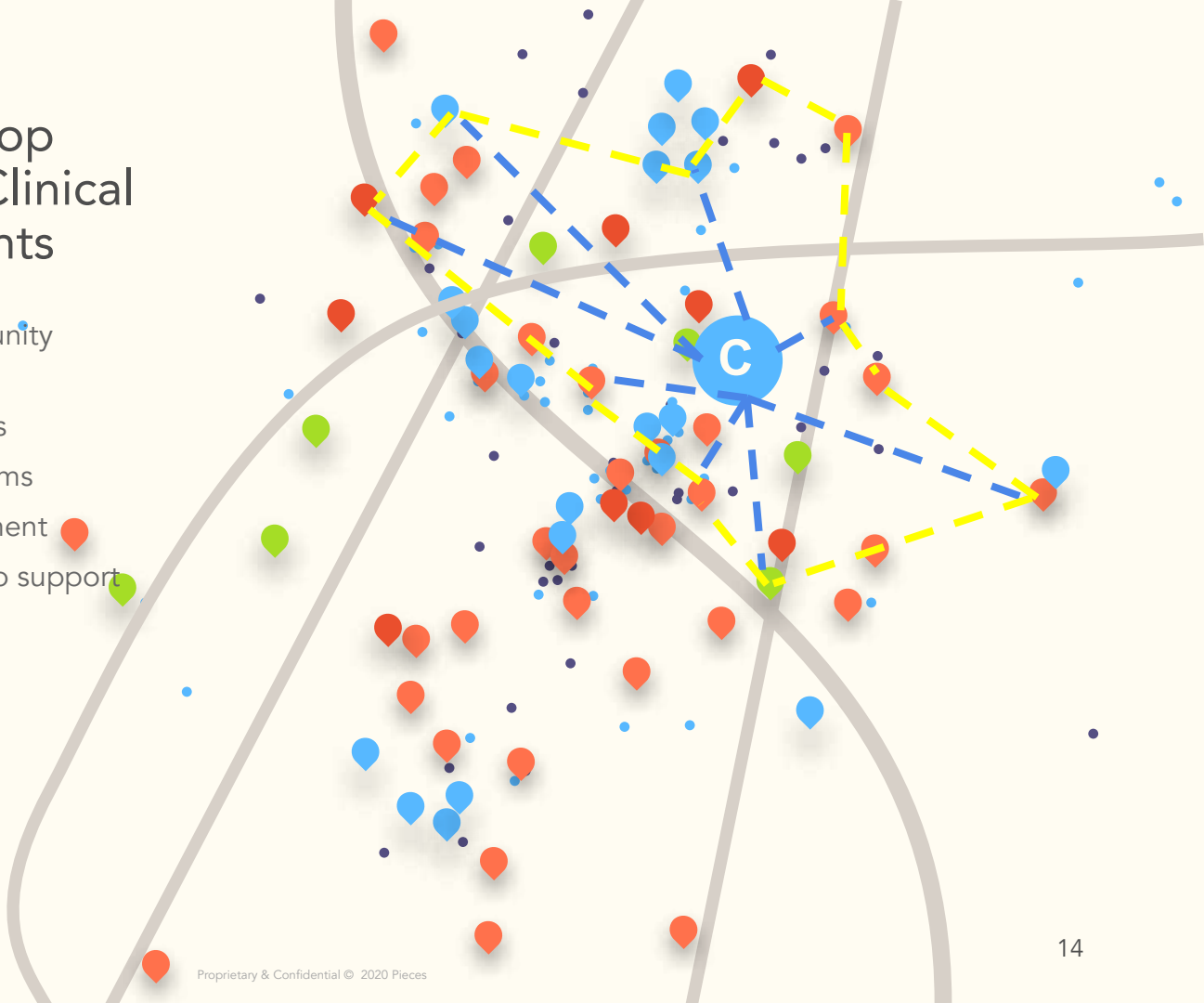
AI-enabled Closed Loop Network to Address Clinical and Social Determinants

- Free resource directory for all Community Based Organizations (CBOs)
- Accept and send closed-loop referrals
- Integrating “invisibly” with EHR systems
- Full community-based case management
- Implement community partnerships to support social determinants of health (SDoH)
- Create Social Vulnerability Index (SVI)
- Capture social screenings at scale

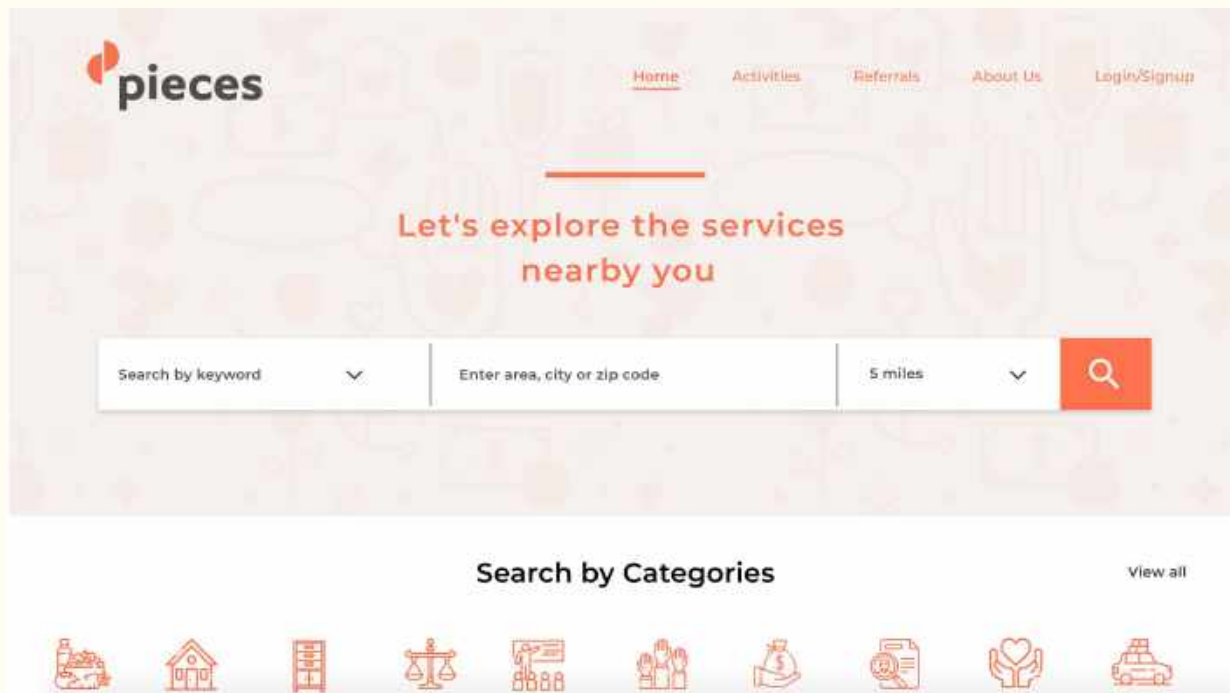


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Pieces Guide



Pieces Connect for Community Based Organizations



The screenshot displays the PIECES Iris software interface. At the top, there is a navigation bar with 'Clients', 'Appointments', and 'Referrals' tabs. Below this is a search bar and buttons for 'Add new client' and 'Wipe browser'. A sidebar on the left contains a menu with options like 'Programs', 'Case Managers', 'Enrollment Status', 'Client Tags', 'Last Encounter Date', 'Org Relationship', and 'Next Appointment Date'. The main area shows a table of client records with columns for Name, Next Appointment, Birth, Last Encounter, Cell Phone, Master ID, Client ID, and Address Line 1.

Name	Next Appointment	Birth	Last Encounter	Cell Phone	Master ID	Client ID	Address Line 1
Agins, Jane		01/14/2018	02/07/2018		281174	70	1361 River Bend
Agins, Rechar		08/04/1972	02/07/2018	(714) 251-4447	280791	67	1361 River Bend
Agins, Wendi	24/05/2018 11:00 AM	07/02/1958			280790	68	1361 River Bend Dr
Alex, Wayne		10/03/1972	02/08/2018		280788	64	2134 Main Ave
Amor, Steve		02/14/1962	12/05/2018	(909) 337-8878	50748	2	238 Hill Street St
Artis, James			09/02/2018		248887	27	
Artis, Robert		02/05/1942	10/14/2018	(714) 268-6750	207880	91	1060 Midway Ln
Barnes, Anita		09/18/1971	10/04/2018		202952	40	8803 Greenlee Ln
Barnes, Emily		11/18/2007			202957	42	8803 Greenlee Ln
Bat, Amy		05/13/2007	09/26/2018		248970	30	9471 Cimarron Ct
Bat, Jan		10/14/1984	09/26/2018		248968	28	9471 Cimarron Ct
Bat, Maria		11/11/1982	09/26/2018		248969	29	9471 Cimarron Ct
Bat, Wilma		06/28/1948	01/07/2018		202938	81	3121 Park Ln
Barnes, Billy	24/05/2018 01:00 PM	07/02/1971		(714) 637-4806	280782	60	1361 River Bend Dr
Chase, White	04/02/2018 02:00 AM	09/12/1972	11/02/2018	(714) 294-8888	281031	02	4022 W University Blvd



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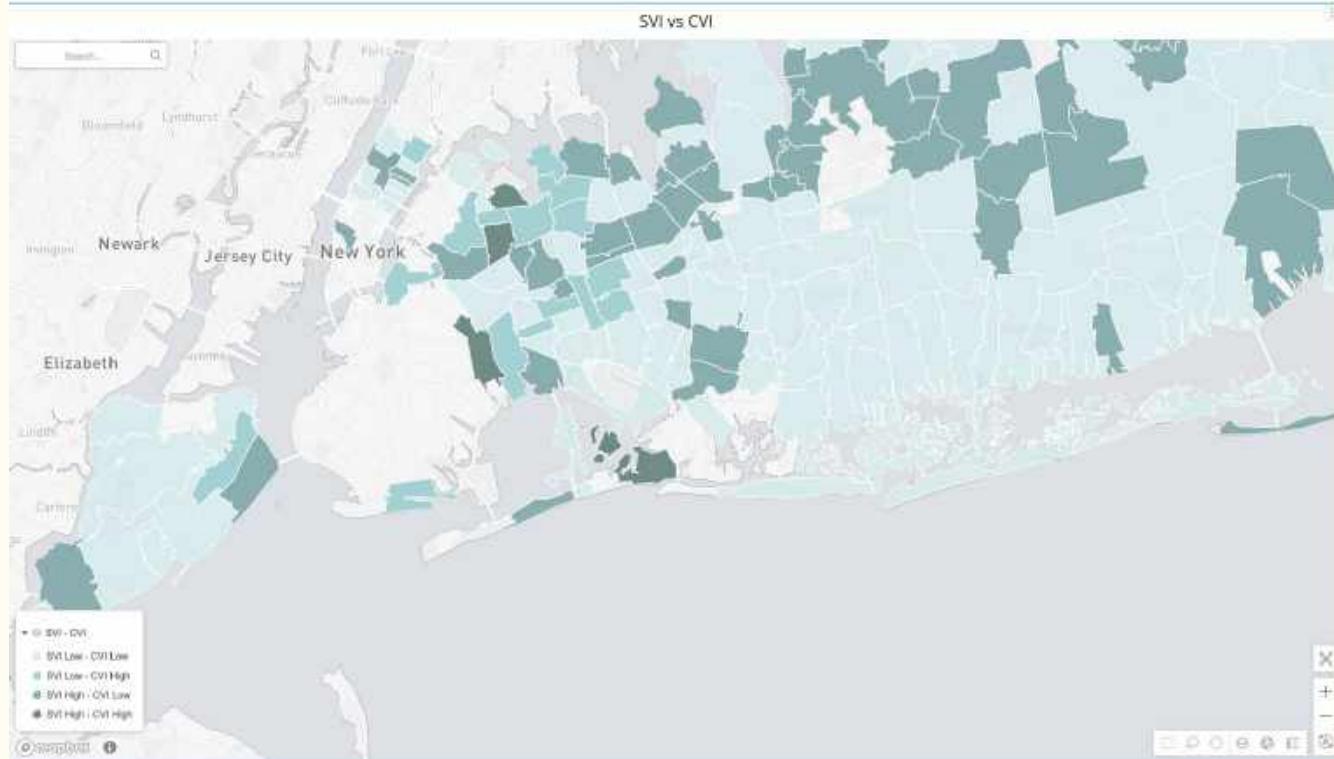
Pieces Reporting Options



Enrollment Dashboard



Pieces Consultative Analytics



A Connected Community with



2X

82%

10,464

Inter-agency referrals

256,139

Clients enrolled in
community based services

As likely to be a
high risk patient
for readmissions

Referrals made in
Connect close the
loop

1,000+

Orgs in Pieces Connect

1,173,810

Documented encounters
across 417 locations

58%

Reduction in ED Utilization when partners with
community organizations on Pieces Connect



COMMENTARY

Connected Communities of Care in Times of Crisis

Keith C. Kosel, PhD, MHSA, MBA, David B. Nash, MD, MBA

Vol. No. | August 24, 2020

DOI: 10.1056/CAT.20.0361

The Parkland Center for Clinical Innovation (PCCI), a health care analytics and R&D organization based in Dallas, has developed an innovative model of community governance and cooperation to impact the health and welfare of the county's residents. The Dallas Connected Community of Care is an entity that — working with community-based organizations, local government leaders, and health care providers in the Dallas metroplex — has been able to quickly assemble data to help identify hotspot neighborhood locations where the Covid-19 virus is having a disproportional impact on the residents, many of whom are poor and underserved. With that information, they have created targeted communications to improve containment efforts through community-wide awareness and education messaging. By connecting local CBOs and faith-based organizations with public health workers and clinicians, effective contact tracing and care plan development has been achieved for high-risk individuals.

When a major disaster occurs — such as a tornado, earthquake, or pandemic such as Covid-19 — health care providers and community-based organizations (CBOs) are called upon to provide more

Thank You!

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