



Impact of the Social Determinants of Health on the Health Care System



September 25th, 2022

ASHNOOR RAHIM | EXECUTIVE DIRECTOR

Overview

- Who are we?
- What does the data tell us?
- How do we keep our communities healthy?

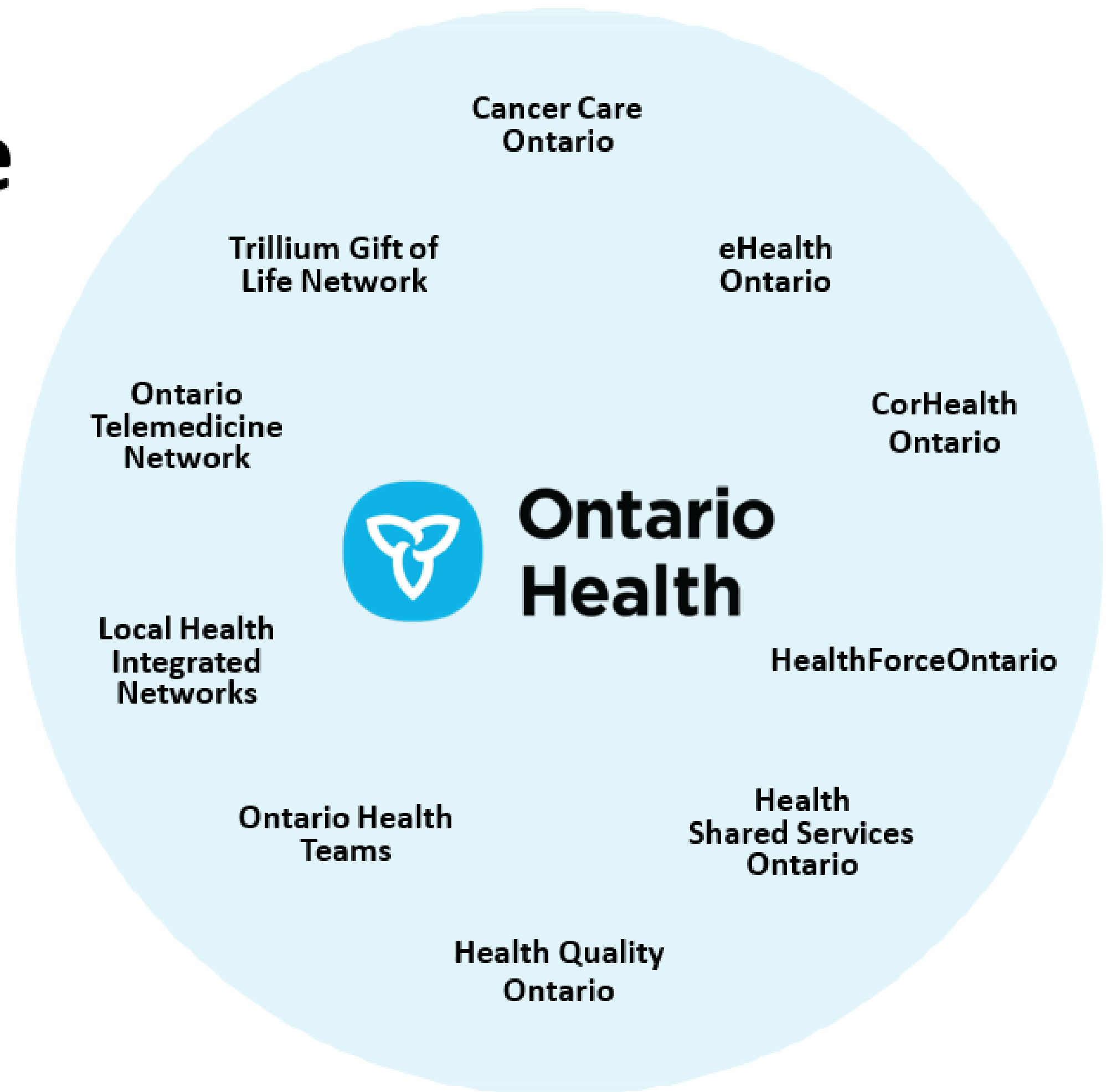


Ontario Health: Connecting Care

OH MANDATE

To better coordinate and connect Ontario's health care system, to make it more efficient and support the delivery of the best possible patient-centred care.

Connecting Care Act, 2019



The Path Forward: Integrated Care

Primary
Care



Hospital
Services



Mental Health &
Addictions Services



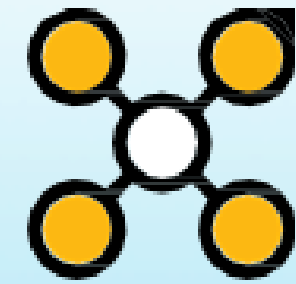
Long-Term
Care



Home &
Community
Care



Social Service
Agencies/Housing



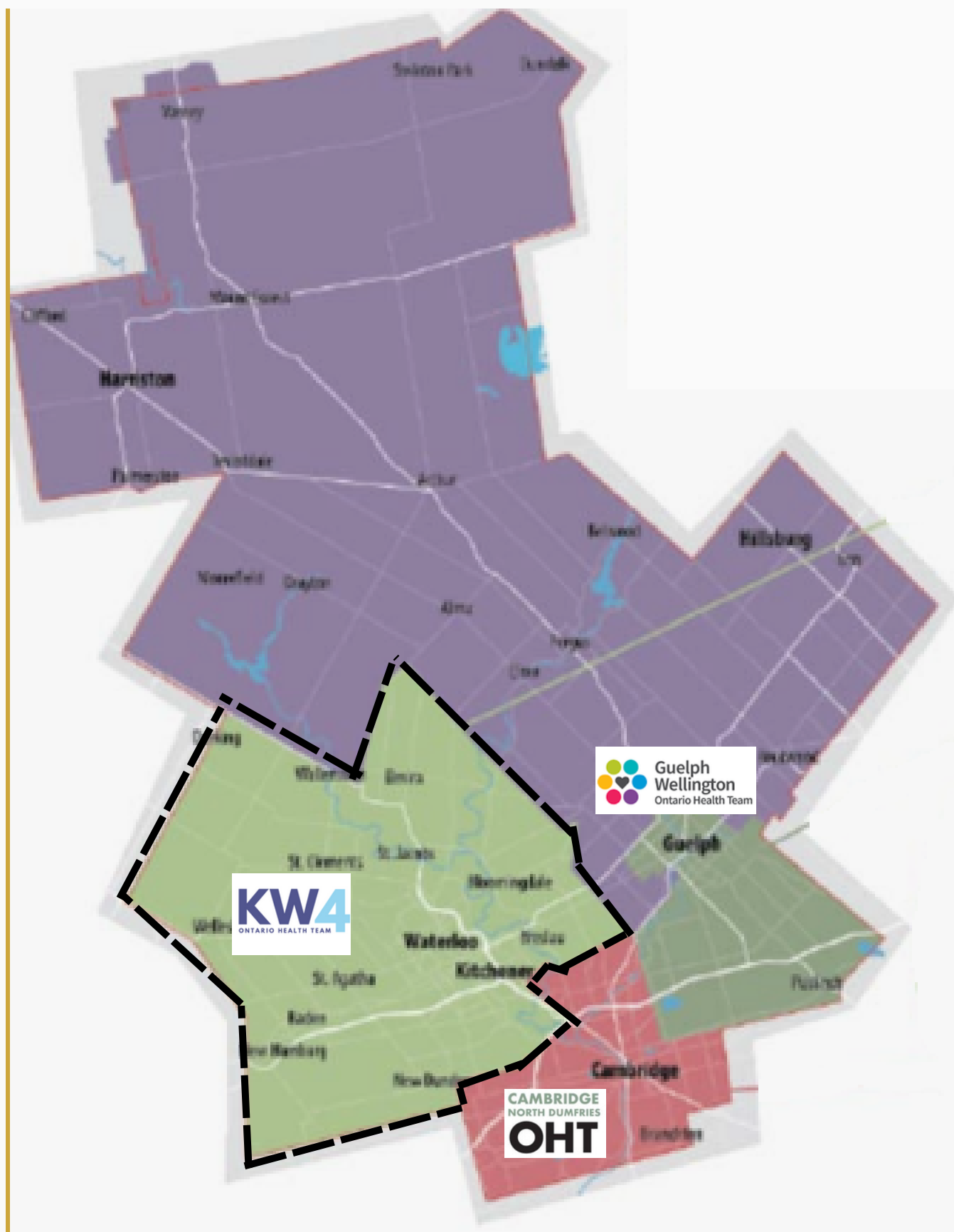
ONTARIO HEALTH TEAMS



KW₄ Ontario Health Team

A community where everyone thrives and no one is left behind





Who we are

◆ Territory Coverage

The map highlights the KW4 Ontario Health Team (OHT) coverage area including 2/3 cities part of the Waterloo Region. KW4 represents Kitchener, Waterloo, and the Townships of Wellesley, Wilmot and Woolwich. Neighbouring OHTs include Cambridge North Dumfries and Guelph Wellington.

◆ 41 Partners

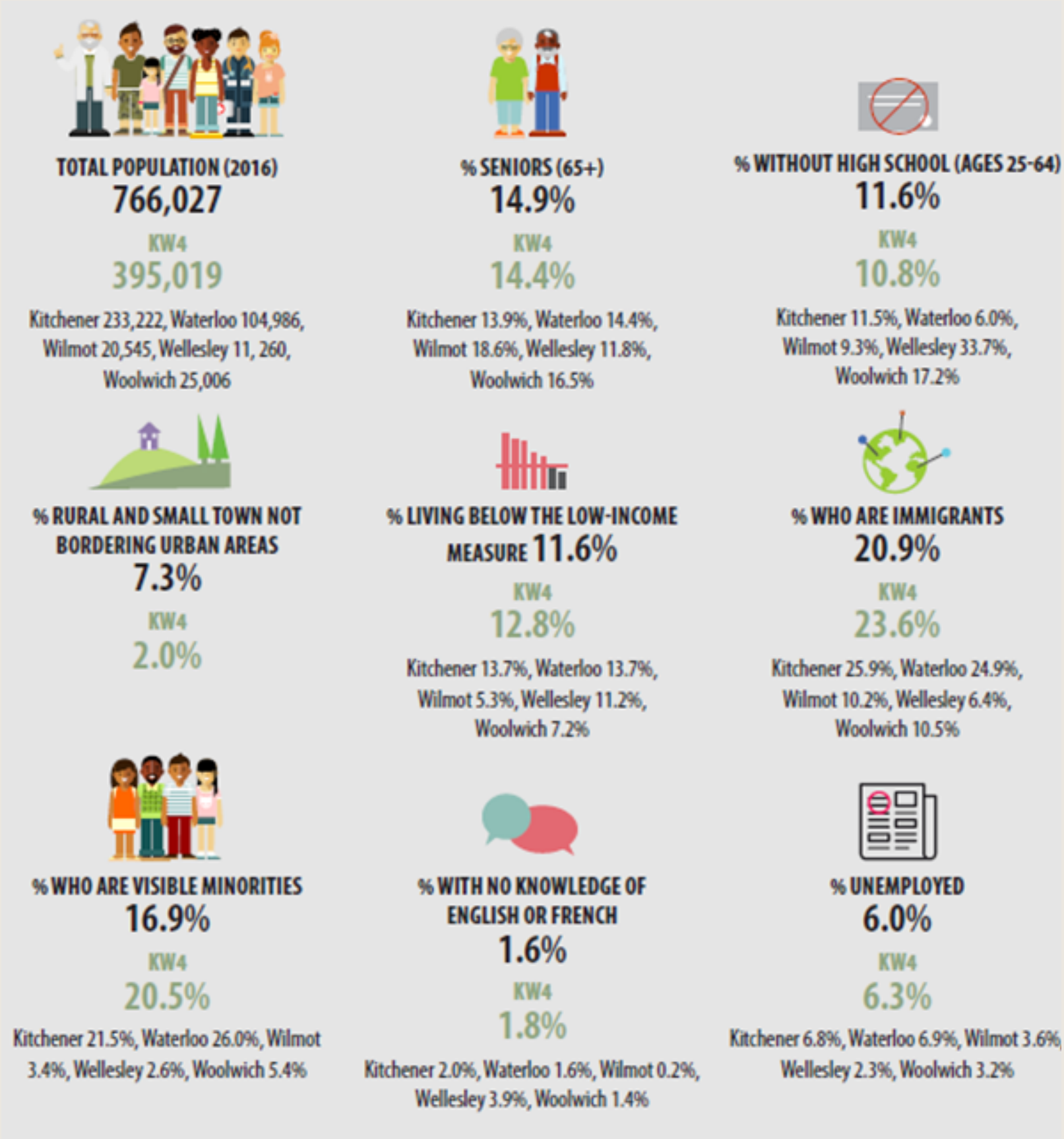
The current partnered organizations (and growing) include:

- Hospital
- Home and Community Care (SPO & HCCSS)
- Mental Health and Addiction
- Community Health Centre
- Long-Term Care Home
- Nurse Practitioner Led Clinic
- Primary Care (FHT)

◆ Cross-Industries Collaboration

Having varying industries vested in a common health care focus, collaboration, and support across the different industries including education, technology, healthcare, grassroots, etc.

Our KW₄ OHT Community



Co-designing Care Models

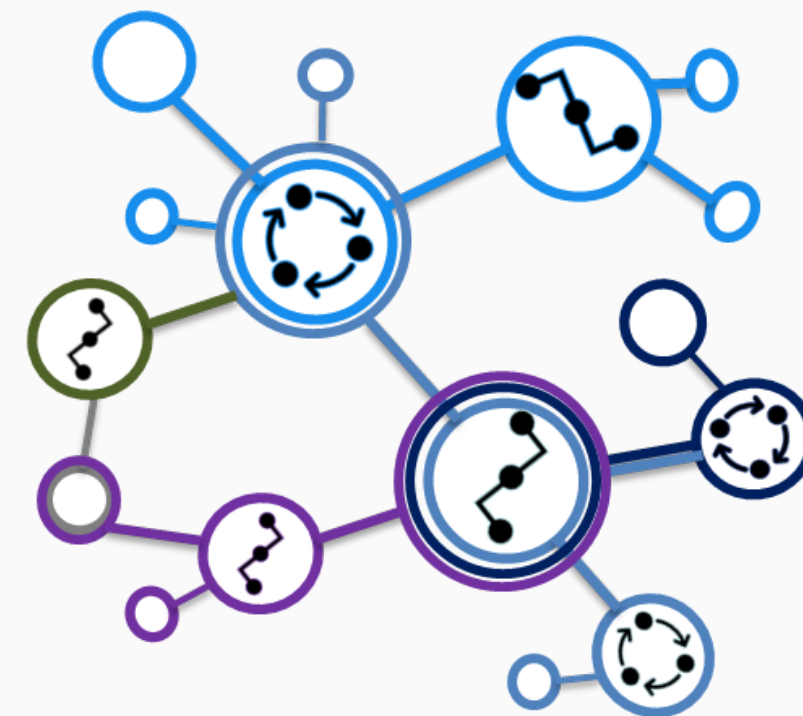
Care Pathways

Care Pathways refer to steps taken to deliver a care process



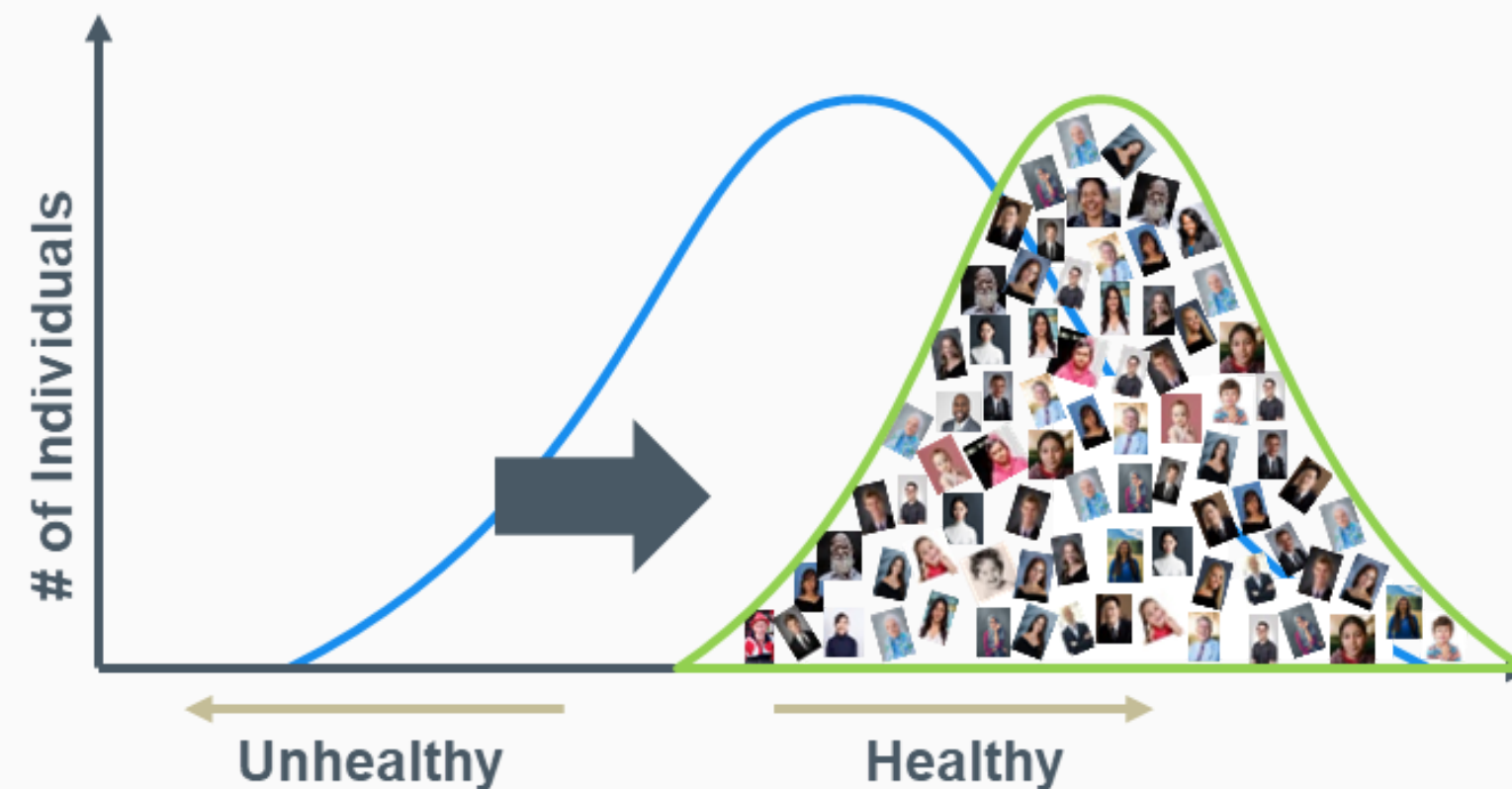
Care Models

Care Models are systems of care with multiple pathways and processes inside



Population Health: Definition

Strategies to squeeze the curve & reduce inequities



“LEAVE NO ONE BEHIND” & TACKLE THE “INVERSE CARE LAW”



X

Social Determinants & Our Impact



Quality of Life Impacts Health Outcomes

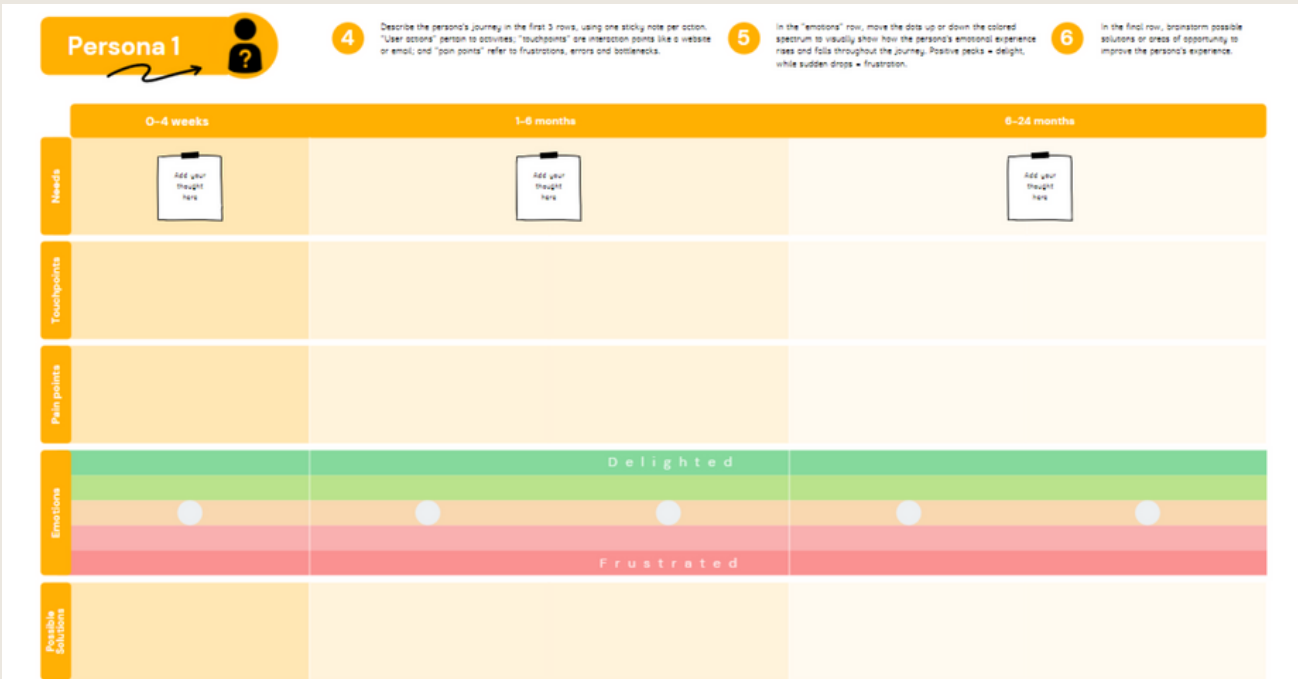
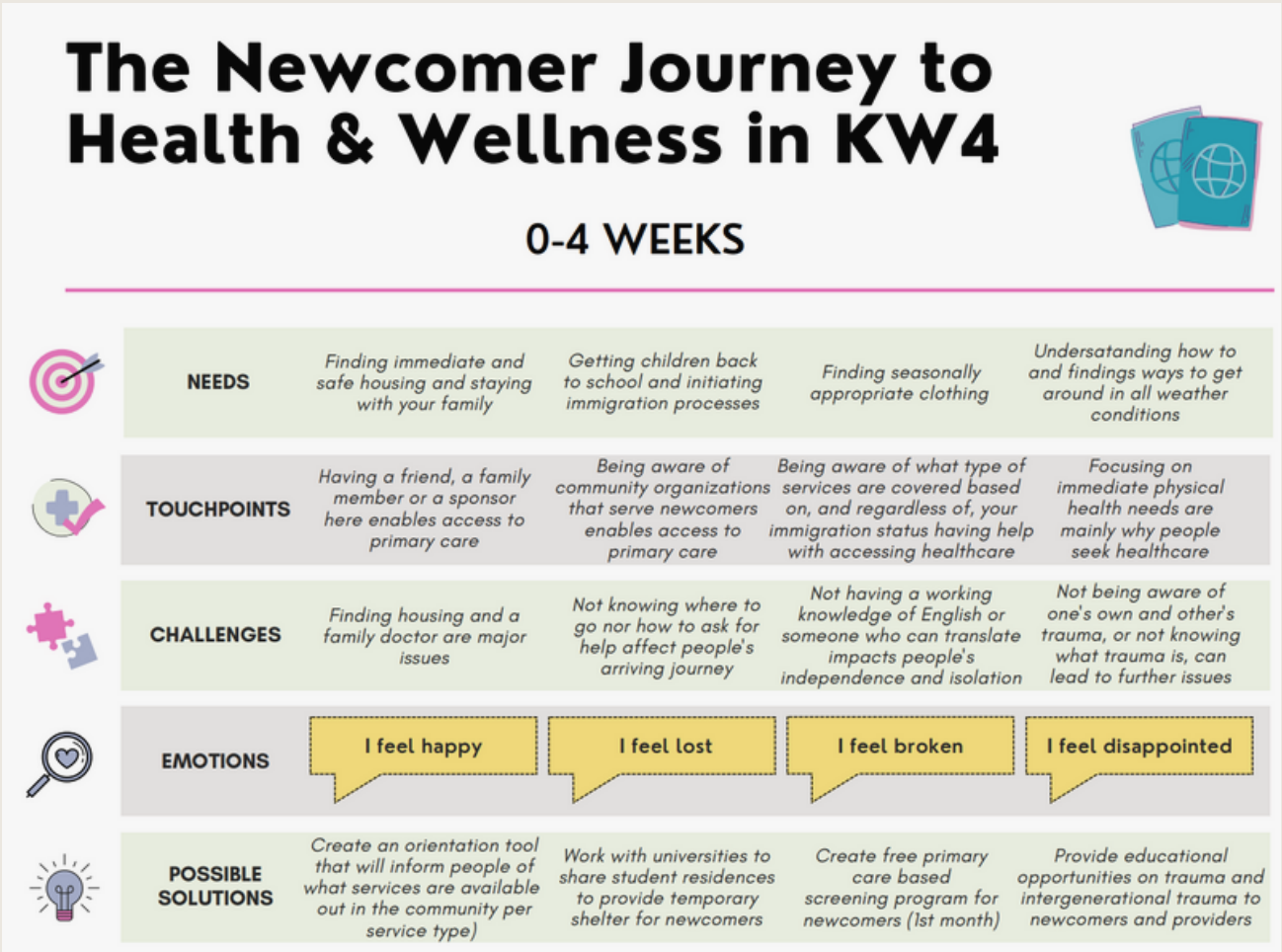




Journey Mapping in support of co-design

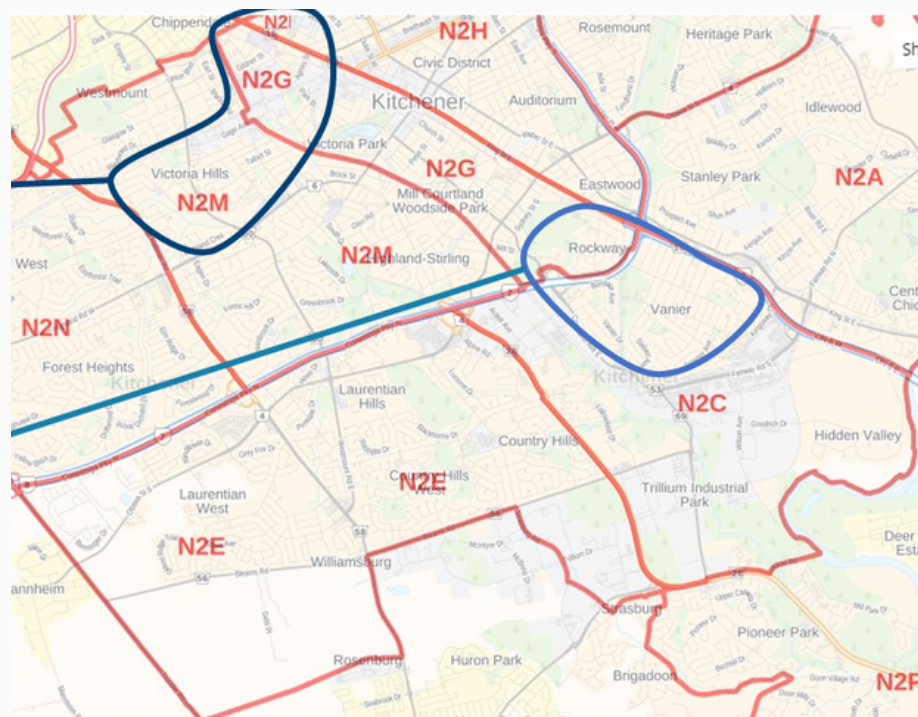
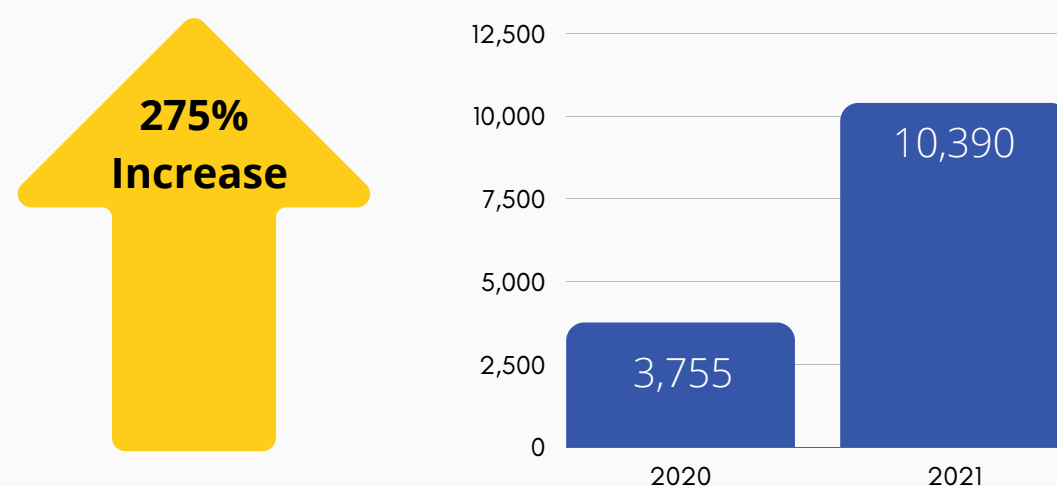
This project continues to help us implement people-centered and evidence-informed system change beyond the healthcare system realm in KW4.

Outcomes from this project have informed our strategic (2022-2024) priorities and population health management efforts.



2022/23 Priority Projects

Results from the data and research



◆ Identified Priority Population: Newcomers

The data has shown 3x more permanent residents in Waterloo-Wellington region. The government has set record-high immigration target levels creating a significant increase in the newcomer population.

◆ Priority Neighbourhoods

Based on the Forward Sortation Area (FSA) the following postal codes have been identified with the highest proportion of recent newcomers all located in downtown Kitchener:

- Victoria Hills/Cherry Hill/KW Hospital (N2G, N2M, N2H)
- Vanier/Rockway (N2G, N2C)

◆ Health Status/Chronic Conditions

Here is what we know from the research:

- Immigrants tend to be healthier than non-immigrants upon arrival
- Across every immigration category the longer they live in the country the more their health declines
- Contributing factors for declining health include social determinates of health

Summary: Key Findings for Newcomers

5yrs

Recent immigrants
arrived

- **Education** – higher level of education
- **Housing** – 40% living in unaffordable housing and 31% in unsuitable housing
- **Employment** – 12% unemployed
- **Poverty** – 33% live in poverty
- **Health** – 51% access MH services with 31% rating negative service
- **Discrimination** – 24% experienced or treated unfairly last 12 months
- **Technology** – tech savvy to navigate



Ambulatory Care Sensitive Conditions Best Management Elsewhere

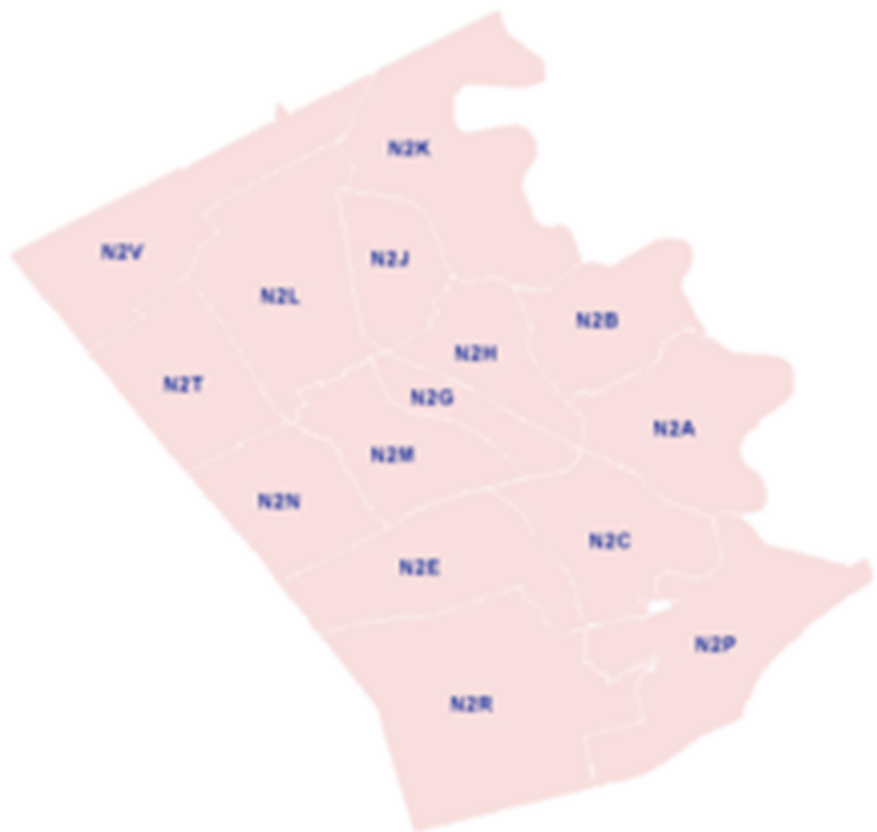
Rate (per 100,000 population) by Condition and FSA

Urban\ Rural	Forward Sortation Area	Population (2016 Census)	FY2021/22 Dec(YTD)														
			# of cases							Rate (per 100000 population)							FY 2021/22 Total
			Angina	Asthma	COPD	Diabetes	Epilepsy	Heart Failure	Hypertension	Angina	Asthma	COPD	Diabetes	Epilepsy	Heart Failure	Hypertension	
Kitchener	Kitchener (Central) - N2G	15,756			8	16	6	15	3	0	0	51	102	38	95	19	305
	Kitchener (East) - N2A	32,495	2	1	11	11	12	15	1	6	3	34	34	37	46	3	163
	Kitchener (North Central) - N2H	22,267		5	30	10	3	7		0	22	135	45	13	31	0	247
	Kitchener (Northeast) - N2B	17,413	2	1	2	7	6	9	1	11	6	11	40	34	52	6	161
	Kitchener (Northwest) - N2M	36,560		7	23	10	8	30	3	0	19	63	27	22	82	8	222
	Kitchener (South Central) - N2C	17,944		5	6	11	7	5	4	0	28	33	61	39	28	22	212
	Kitchener (South West) - N2E	42,027		7	10	14	7	10	2	0	17	24	33	17	24	5	119
	Kitchener (South) - N2R	16,559	1	4	1		2	3		6	24	6	0	12	18	0	66
	Kitchener (Southeast) - N2P	22,889			3	2	1	7		0	0	13	9	4	31	0	57
	Kitchener (West) - N2N	28,077	1	1	3	3	5	9	5	4	4	11	11	18	32	18	96
Waterloo	Waterloo (East) - N2K	29,869		4	2	8		7	2	0	13	7	27	0	23	7	77
	Waterloo (Northwest) - N2V	19,420	1	1		5	1	9		5	5	0	26	5	46	0	88
	Waterloo (South) - N2L	29,181	1	4	9	17	3	10	4	3	14	31	58	10	34	14	164
	Waterloo (Southeast) - N2J	18,469		3	3	4	3	7	1	0	16	16	22	16	38	5	114
	Waterloo (Southwest) - N2T	22,161	1	2	2	6	5	3	1	5	9	9	27	23	14	5	90
Other/ Rural	Elmira - N3B	12,462		2	4		4			0	16	32	0	32	0	0	80
	New Hamburg (Baden) - N3A	17,344			1	5	2	2	2	0	0	6	29	12	12	12	69
	Wellington County & Rural Waterloo Region - N0B	84,875	2	2		9	3	10	1	2	2	0	11	4	12	1	32
NA		-		2	5	5	3	7									
Grand Total		485,768	11	51	123	143	81	165	30								

- 4 FSAs (N2G,N2H,N2M, N2C) account for 37% (92,527) of the population in Kitchener (251,987) but account for 55% of ACSC cases
- There is a higher per capita concentration of ACSC hospitalizations amongst residence living in Kitchener and more specifically in three FSAs (first three digits of postal code):
 - COPD – Kitchener North Central – N2H (part of Victoria Hills/Cherry Hill/KW Hospital)
 - Diabetes – Kitchener Central – N2G (part of Victoria Hills/Cherry Hill/KW Hospital and Vanier/Rockway)
 - Heart Failure – Kitchener Central – N2G and Kitchener Northwest – N2M (part of Victoria Hills/Cherry Hill/KW Hospital)

Caregiver Distress Amongst Home Care Clients

Adjusted Caregiver distress prevalence by KW4 FSA (2019_01 to 2022_02)



FSA	Significant	Adjusted Rate (CI)
N0B*	NS	58.2 (55.2-61.0)
N2A	NS	62.6 (58.7-66.5)
N2B	HT	67.6 (61.8-73.3)
N2C	HT	69.7 (64.7-74.9)
N2E	LT	52.5 (48.6-56.5)
N2G	NS	55.1 (49.9-60.1)
N2H	HT	71.2 (65.5-76.8)
N2J	NS	63.7 (59.3-68.1)
N2K	NS	63.0 (58.3-67.7)
N2L	NS	59.4 (56.0-62.9)
N2M	LT	48.8 (45.1-52.5)
N2N	LT	50.8 (46.8-54.9)
N2P	NS	59.6 (54.5-64.6)
N2R	NS	50.5 (35.0-66.1)
N2T	HT	65.7 (60.7-70.9)
N2V	HT	68.8 (61.3-76.3)
N3A*	NS	61.9 (55.6-68.2)
N3B*	NS	63.9 (58.0-70.0)

* Rural area

- The two highest areas of caregiver distress prevalence in KW4 between January 2019 and February 22, 2022 occurred in:
 - Kitchener North Central – N2H (part of Victoria Hills/Cherry Hill/KW Hospital)
 - Kitchener South Central – N2C (part of Vanier/Rockway)

Frequent Emergency Department Visits for Help with Mental Health & Addictions

Visit_cat	<4								>= 4								Total
Subchapter	N2A	N2E	N2G	N2H	N2J	N2L	N2M	Total	N2A	N2E	N2G	N2H	N2J	N2L	N2M	Total	
F00-F09	38	34	12	29	31	51	44	239			8		8		4	20	259
F10-F19	86	71	112	128	78	147	133	755	60	58	78	104	113	121	57	591	1346
F20-F29	30	33	43	30	40	49	69	294	15	60	54	87	18	27	32	293	587
F30-F39	55	54	33	29	57	83	91	402	11	8	20	6	10	25	26	106	508
F40-F48	85	126	84	75	81	164	117	732	46	34	80	23	10	52	73	318	1050
F50-F59	1	2	4	4	7	4	6	28									28
F60-F69	3	3	3		1	11	2	23				90	5	4	10	109	132
F80-F89		2	1	1			3	7	9							9	16
F90-F98	5		2		1	4	3	15									15
F99				1				1									1
Total	303	325	294	297	296	513	468	2496	141	160	240	310	164	229	202	1446	3942

Visit_cat	<4	>= 4
Subchapter	99	99
F00-F09	3	
F10-F19	101	113
F20-F29	43	36
F30-F39	8	8
F40-F48	24	16
F50-F59	1	
F60-F69		9

- 3 of the top 7 FSA where patients who are frequently visiting the ER for help with MH&A include neighbourhoods with the highest proportion of recent immigrants (those that arrived from 2011 to 2016) including:
 - Kitchener Central – N2G (part of Victoria Hills/Cherry Hill/KW Hospital and Vanier/Rockway)
 - Kitchener North Central – N2H (part of Victoria Hills/Cherry Hill/KW Hospital)
 - Kitchener Northwest – N2M (part of Victoria Hills/Cherry Hill/KW Hospital)

Alternate Level of Care (ALC) by Forward Sortation Area (FSA)

Urban/ Rural	FSA Description	Population 2016 Census	% of population	FY 2021/22						
				ALC Cases	ALC Cases per 100,000 population	ALC Days	ALC Days per 100,000 population	Inpatient Days	Inpatient Days per 100,000 population	ALC Rate (%)
Kitchener	Kitchener(Southwest)-N2E	42,027	8.7%	116	276	2,164	5,149	4,061	9,663	53.3%
	Kitchener(Northwest)-N2M	36,560	7.5%	164	449	2,345	6,414	4,848	13,260	48.4%
	Kitchener(East)-N2A	32,495	6.7%	170	523	4,468	13,750	8,658	26,644	51.6%
	Kitchener(West)-N2N	28,077	5.8%	107	381	1,498	5,335	3,058	10,891	49.0%
	Kitchener(Southeast)-N2P	22,889	4.7%	36	157	636	2,779	1,218	5,321	52.2%
	Kitchener(NorthCentral)-N2H	22,267	4.6%	149	669	2,874	12,907	5,744	25,796	50.0%
	Kitchener(Southcentral)-N2C	17,944	3.7%	97	541	1,541	8,588	2,866	15,972	53.8%
	Kitchener Northeast-N2B	17,413	3.6%	89	511	1,476	8,476	3,027	17,384	48.8%
	Kitchener(South)-N2R	16,559	3.4%	14	85	211	1,274	411	2,482	51.3%
	Kitchener(Central)-N2G	15,756	3.2%	133	844	2,064	13,100	4,703	29,849	43.9%
Waterloo	Waterloo(East)-N2K	29,869	6.1%	64	214	918	3,073	2,263	7,576	40.6%
	Waterloo(South)-N2L	29,181	6.0%	155	531	2,206	7,560	4,309	14,766	51.2%
	Waterloo(Southwest)-N2T	22,161	4.6%	72	325	953	4,300	1,903	8,587	50.1%
	Waterloo(Northwest)-N2V	19,420	4.0%	56	288	1,126	5,798	1,912	9,846	58.9%
	Waterloo(Southeast)-N2J	18,469	3.8%	107	579	2,063	11,170	3,799	20,570	54.3%
Other / Rural	Wellington County&Rural Waterloo Region-N0B	84,875	17.5%	82	97	1,351	1,592	2,602	3,066	51.9%
	New Hamburg(Baden)-N3A	17,344	3.6%	51	294	1,060	6,112	1,955	11,272	54.2%
	Elmira-N3B	12,462	2.6%	36	289	662	5,312	1,150	9,228	57.6%
Selected FSAs (N2G, N2H, N2M, N2C)		92,527		543	587	8,824	9,537	18,161	19,628	48.6%
KW4 OHT Total		485,768		1,698	350	29,616	6,097	58,487	12,040	50.6%
Selected FSAs as a percentage of KW4 OHT			19.0%	32.0%		29.8%		31.1%		

- 4 FSAs (N2G,N2H,N2M, N2C) with the highest proportion of recent immigrants account for only 19% of the population in KW4 but 32% of ALC cases
- The highest per capita concentration of ALC cases occurs amongst residence living in:
 - N2G (part of Victoria Hills/Cherry Hill/KW Hospital and Vanier/Rockway)
 - N2H(part of Victoria Hills/Cherry Hill/KW Hospital)

Executive Sponsors



Projects

**Create NICTs in
priority
neighbourhoods**

**Develop a
Newcomer App for
use by recent
newcomers**

**Support Primary
Care Integration &
Evolution of a
Governance
model**

Initiatives

- Identify seniors at risk in the community through Integrated Care Team (ICT)
- Emergency Department Notification
- ALC Identification & Management

- Improve newcomers' ability to self-navigate local health and social services to improve their quality of life

- Develop a Primary Care Council and Governance Model
- Funding Primary Care involvement resources

XIX

KW4
ONTARIO HEALTH TEAM



Thank you!



ashnoor.rahim@grhosp.on.ca

