


healthfirst network
LEARN | UNDERSTAND | CARE

The Practice Health Atlas

Epidemiology & Mapping

Business & Clinical Modelling

Presented by
Debbie Stratford



healthfirst network
LEARN | UNDERSTAND | CARE

Overview

- Practice Health Atlas™ (PHA) concept
- What data is collected from the Practice?
- Practice Health Atlas components
- Processes in developing the PHA
- Q & A

healthfirst network
LEARN | UNDERSTAND | CARE

Practice Health Atlas Concept

The Practice Health Atlas is a decision support tool that aims to inspire **general practice teams** to reflect on their activities and to develop innovative business models for more effective health care services/outcomes.

healthfirst network
LEARN | UNDERSTAND | CARE

Practice Health Atlas Objectives

- To create **vitality** in general practice
- To develop a professional **culture** around quality
- To **integrate** health data with other data
- To **synthesize** aggregated de-identified general practice data
- To **reflect** on clinical & business performance
- To **develop** business models and drive innovation

healthfirst network
LEARN | UNDERSTAND | CARE

Practice Health Atlas (PHA) Components

Epidemiology
& Mapping



Business & Clinical
Modelling



healthfirst network
LEARN | UNDERSTAND | CARE

Epidemiology & Mapping



Practice Health Atlas (PHA) Epidemiology & Mapping

METHODOLOGY

- Selected practice "Patient population"
 - Seen in last 15 & 30 months, and all patients.
- Practice & Census Data Synthesis
- Geographical / Spatial Information Systems (GIS)
- Chronic Disease Profiles
- Benchmarking – National
- Data quality & cleansing feedback

Practice Health Atlas (PHA) Epidemiology & Mapping

OUTPUTS

- Practice location relative to others
- Practice Demographics and profiling
- Chronic disease maps and profiles:
 - Asthma
 - COPD
 - CHD
 - Stroke
 - Hypertension
 - Diabetes
 - Mental Health (Depression, Anxiety, Schizophrenia)
 - Bone and Joint Disease

Practice Health Atlas (PHA) Practice Profiling (1)

Map: Practice patient population (% catchment by postal area)

Patients seen in the last 15 mths

General Practice Quality & Vitality

Practice Health Atlas (PHA) Practice Profiling (1)

Patient population postcode profile

Market share of the patient population

Postcode	No. patients seen	Percent of patient population	Total no. people* living in postal area	Percent of total no. people
5016	4,439	20.3%	8,077	55.0%
5018	4,083	19.0%	5,999	68.1%
5017	3,179	14.8%	4,921	64.6%
5019	2,903	11.7%	3,951	21.6%
5015	1,663	7.7%	4,781	34.8%
5014	555	4.4%	11,269	5.5%
5013	530	2.5%	9,698	6.5%
5021	538	2.5%	5,807	9.2%
5022	369	1.8%	13,984	2.6%
5023	347	1.6%	15,157	2.3%
Total	18,714		88,755	21.1%

* Source: Australian Bureau of Statistics (ABS), 2008 Census Data Base; Community Profile, Canberra, ABS

Chart 5: No. of patients seen as % of your patient population compared with % total persons in the top 10 postcodes.
Table 4: No. of patients seen versus no. of total persons in the top 10 postcodes.

General Practice Quality & Vitality

Practice Health Atlas (PHA) Practice Profiling (2)

Index of Socio-Economic factors

Index of socio-economic disadvantage for the top 10 postcodes

Postcode	Total no. people* living in postal area	Disadvantage score
5016	8,077	983
5018	5,999	1039
5017	4,921	844
5019	3,951	959
5015	4,781	917
5014	11,269	922
5013	9,698	855
5021	5,807	1062
5022	13,984	1033
5023	15,157	913
TOTAL	88,755	
AVERAGE		953

Table 5: Index of socio-economic factors for the top 10 postcodes.
Chart 7: Index of socio-economic factors for the top 10 postcodes. SEIFA Index of advantage/disadvantage for the top 10 postcodes.

General Practice Quality & Vitality

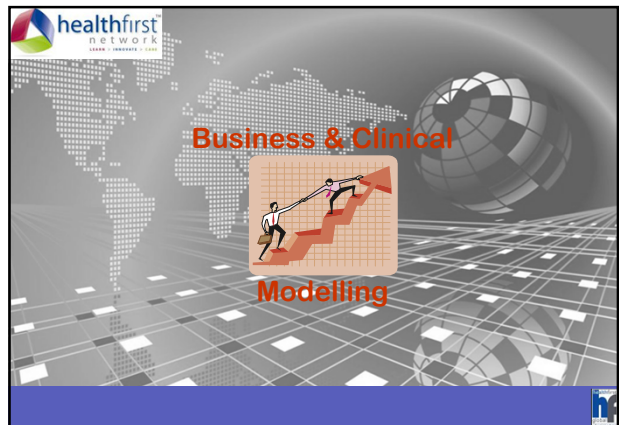
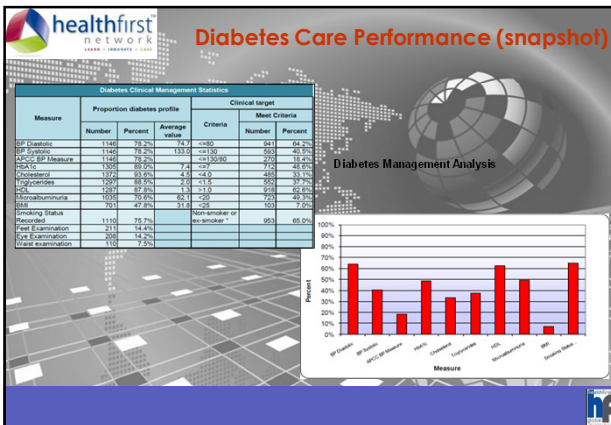
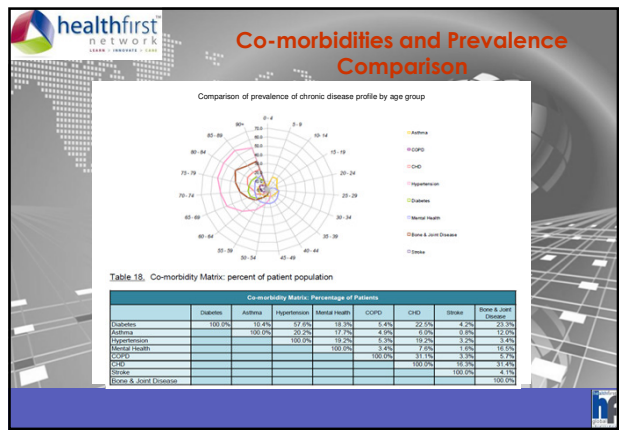
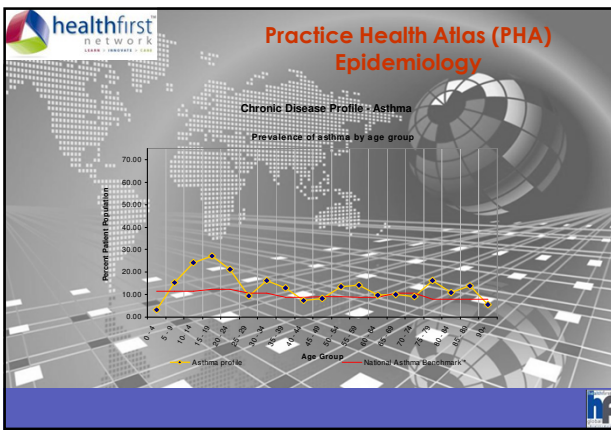
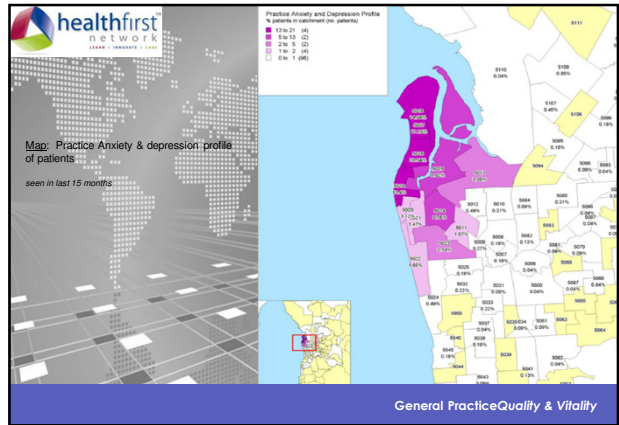
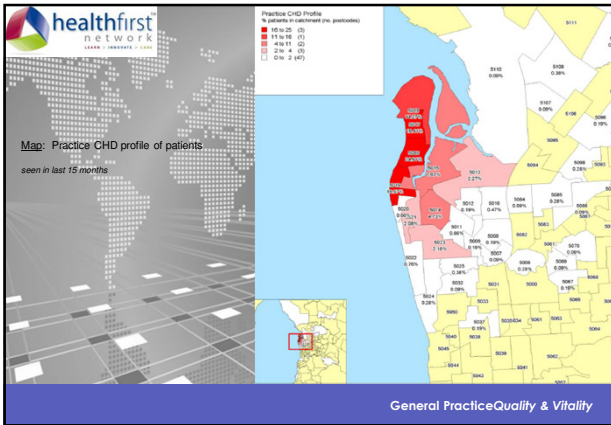
Practice Health Atlas (PHA) Practice Profiling (2)

Chronic Disease Profiles

Chronic Disease Profile	Number patients
Asthma profile	1956
COPD profile	389
CHD profile	1056
Stroke	172
Hypertension Profile	3029
Diabetes profile	1466
Mental Health profile	2489
Bone and Joint Disease profile	1594

Seen in last 15 months

Map: Practice asthma profile of patients



ATSI Focused PHA

Characteristics of your patient population

	Total all patients	Total ATSI patients
Your total cleansed population*	62771	226
15-month patient population** (7/2/2010)	16423	224
30-month patient population:	21297	224
Pensioners:	5840	121
DVA patients:	234	3
Patients on 5 or more current medications***	5235	104

Chronic Disease Profile	ATSI patients	All Patients
Asthma profile	15	1500
COPD profile	6	263
CHD profile	14	646
Stroke	6	121
Renal Impairment	0	0
Hypertension Profile	76	2721
Diabetes profile	19	1062
Mental Health profile	44	1585
Bone and Joint Disease profile	34	1474

* Excludes patients with no practice or with past tenure, and flags where data is from non-ATSI practices.
** This is referred to as your patient population in this report, and is the cohort upon which the majority of the Practice Health Atlas™ analysis is based.
*** Patients score at least once in the last 15 months period

ATSI Focused PHA

Age	Females		Males		Total	
	Percent	Number	Percent	Number	Percent	Number
0 - 4	46.3%	310	53.6%	359	11.0%	670
5 - 9	52.5%	271	47.5%	245	8.5%	516
10 - 14	47.4%	161	52.6%	179	5.6%	340
15 - 19	66.1%	294	33.9%	151	7.3%	445
20 - 24	61.7%	334	38.3%	207	8.9%	541
25 - 29	59.7%	281	40.3%	190	7.8%	471
30 - 34	59.2%	254	40.8%	175	7.1%	429
35 - 39	56.7%	266	43.3%	203	7.7%	469
40 - 44	60.6%	311	39.4%	202	8.4%	513
45 - 49	54.7%	250	45.3%	237	7.5%	487
50 - 54	55.7%	235	44.3%	187	6.9%	422
55 - 59	55.5%	183	44.5%	147	5.4%	330
60 - 64	56.6%	124	43.4%	95	3.6%	219
65 - 69	53.7%	65	46.3%	59	2.0%	124
70 - 74	58.0%	47	42.0%	34	1.3%	81
75+	57.6%	30	41.2%	21	0.8%	51

* Total number 3850 include patients with no sex recorded

ATSI Focused PHA

	ATSI population profile			Used for Business Modelling			Based on ATSI population		
	Disease Prevalence	Percent Count - Primary Medication	% Your ATSI Population *	Disease Prevalence	Percent Count - Primary Medication	% Your Patient Population *	Expected No. of patients	Average % over whole population	Difference
Diabetes	19	19	8.5	1062	1062	6.5	10	4.5	9
Asthma	15	11	6.7	1500	1394	9.1	23	10.2	-6
CHD	14	6	3.3	646	389	9.9	10	4.3	4
Stroke	6	3	2.7	121	63	6.7	1	0.6	5
Renal Impairment	0	0	0.0	0	0	0.0	1	0.5	-1
Mental Health	44	26	19.6	1585	1181	9.7	24	10.6	20
COPD	6	1	2.3	263	167	1.8	8	3.4	-3
Bone & Joint Disease	34	21	15.2	1474	725	9.0	30	13.4	4
Aboriginal patients	224		100.0	224		1.4			
Aged 4 - 40	1		0.4	217		1.3			
Aged 41 - 45	38		17.4	2488		15.1			
Aged 46 - 49	20		8.9	1304		7.9			
Aged 50 +	26		11.6	1403		8.5			
Multiple Medication (>5)	104		46.4	5235		31.9			

* Your patient practice, based on the last 15 months, n=224
** All patients > 15 years, non-aboriginal residents

PHA Process

A Practice registers their interest and then we –

- consult with them re existing systems / software
- collect de-identified clinical data
- collect billing data for particular chronic disease MBS item numbers
- utilise GIS and other tools to analyse the data
- produce their PHA
- consult with the practice re potential business and clinical systems to improve patient outcomes

Contact Us

Justin Reeves (eHealth Coordinator)
Debbie Stratford (Information Officer)

Phone: 08 8244 3822
Email: pha@awgpn.org.au
Web: www.healthatlas.org.au

Any Questions

?

