Healthcare Workforce Data

Health Professions Network
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HealthForce Minnesota
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OFFICE OF RURAL HEALTH & PRIMARY CARE

For our discussion today:

The Macro Level: Working with healthcare workforce data

The Meso Level: An overview of healthcare workforce data

The Micro Level: Digging deeper into three data sources

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The Macro Level: working with healthcare workforce data

The Meso Level: An overview of healthcare workforce

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Healthcare workforce policy questions

- Healthcare delivery is changing rapidly.
- Policy questions about the healthcare workforce can seem simple, but tend to be driven by complex concerns.
- Relevant datasets are disparate, and most haven't been designed with our questions in mind.

We have to be clear about *what* we're asking, *why* we're asking, and know our data.

Example: Social Workers

Annual new supply:	Current/projected demand:
1,164 (Number of bachelor's and master's prepared social work graduates in Minnesota in **one academic year**.*)	**97** (Current job vacancies**) **83** (Projected annual job openings over the next 10 years***)

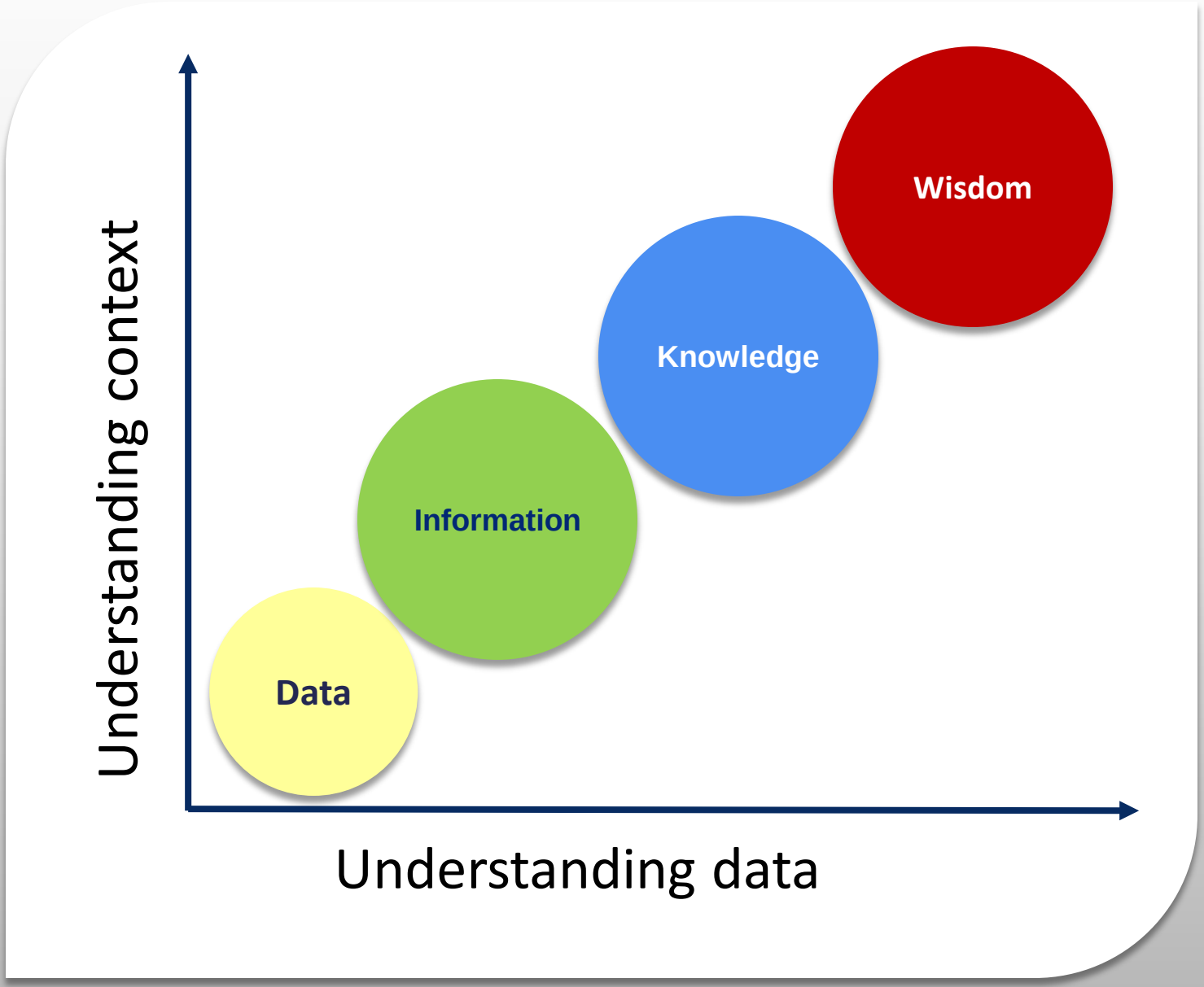
* Integrated Postsecondary Data System, IPEDS, 2012-2013
** Minnesota Department of Employment and Economic Development Job Vacancy Survey, 2nd quarter, 2015, Mental Health and Substance Abuse Social Workers
*** Minnesota Department of Employment and Economic Development Projections program, 2012-2022, Mental Health and Substance Abuse Social Workers

Example: Social Workers, Part 2

3,533

(Number of licensed clinical social workers who provide behavioral health services, per every Minnesota resident.*)

* Board of Social Work data compared to Minnesota population data from the state Demographcer's Office, 2015


Wisdom
Knowledge
Information
Data
Understanding context
Understanding data

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What does "healthcare workforce data" encompass?

Supply

Demand/Need

Characteristics

- Demographics
- Competencies
- Work settings

across

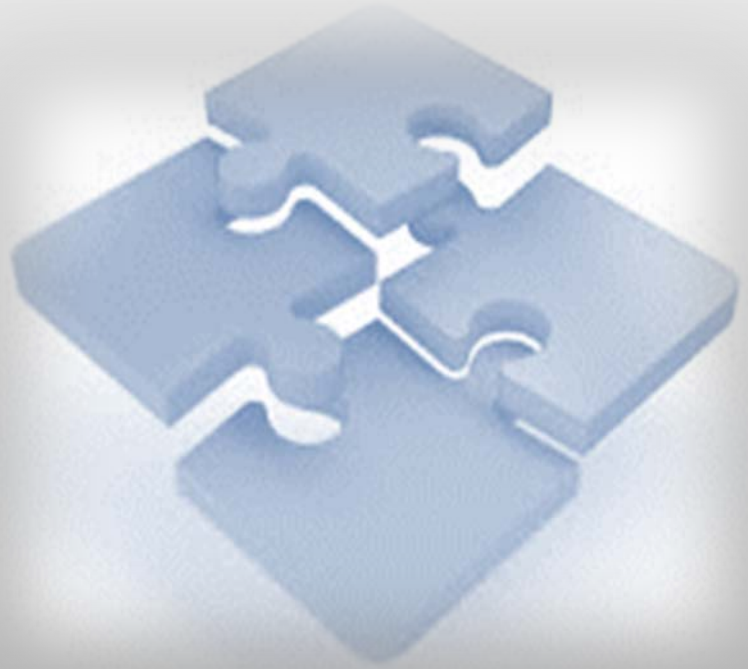
space and **time**

WHO collects healthcare workforce data?

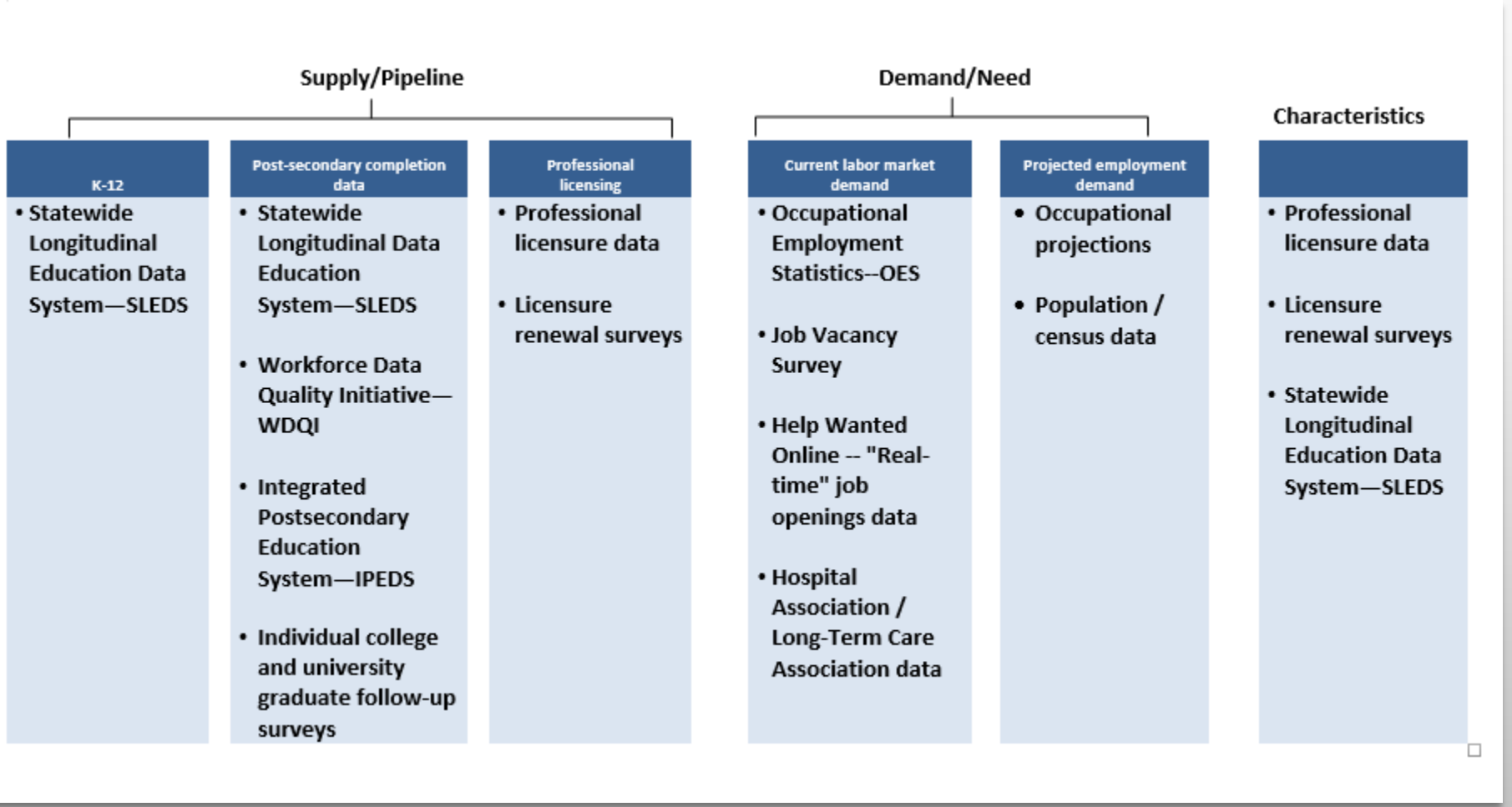
- State health licensing boards
- State/federal government agencies: Health, Labor, and Education
- Hospital/long-term care, and other professional associations
- Colleges and universities
- Private vendors

How? Why?

Most data sets are part of national or state initiatives, initially designed for purposes other than healthcare workforce research.



Overview of (most) available healthcare workforce data*



* And see the Health Resource and Service Administration's compilation of federal data sources: http://bhpr.hrsa.gov/healthworkforce/data/compendiumfederaldatasources.pdf

Overview of (most) available healthcare workforce data

A more detailed compendium of data sources available upon request

Sources of Healthcare Workforce Data

Data Item / Source	Unit of analysis	Data elements available	Occupational areas covered	Data collection details	How to access the data	Questions this dataset can answer
Professional licensure data Various health licensing boards	Individual	• Counts of renewing and new licensees. Currently, MDH presumes licensees with "active" (or "active, restricted") licenses are practicing. • Some demographic info • Mailing address • Practice location (subject to analyst validation)	**Licensed occupations:** • Advanced Practice Registered Nurse • Dental Hygienist • Dental Therapists • Dentists • Licensed Practical Nurse • Marriage & Family Therapists • Mental Health Counselors (LPCCs) • Pharmacists • Physical Therapist • Physical Therapist Assistant • Physician Assistants • Physicians (including Psychiatrists) • Registered Nurses • Respiratory Therapists • Social Workers	Data collection rules and procedures vary across boards, but in general, boards collect basic information on licensees online at the time of initial license application or renewal. Renewal cycles vary across professions: some professions require renewal every year; some every other year. Licensing boards collect this data for administrative rather than research purposes, so MDH analysts format, clean, and validate data before analyzing.	• Contact individual licensing board, or • Use Minnesota Health Workforce Data Reporting Tool: www.health.state.mn.us/divs/orhpc/workforce/database/healthsum.cfm or • For specialized analyses, contact Minnesota Department of Health, Office of Rural Health and Primary Care (MDH, ORHPC): 651-201-3838.	**Questions about current supply, such as:** • How many licensed healthcare professionals (e.g., physicians / RNs / dental therapists) are currently practicing in Minnesota? • Where are licensed healthcare professionals practicing, based on mailing address?
License renewal questionnaire Minnesota Department of Health, Office of Rural Health ·d Primary (MDH,	Individual	Characteristics of new and renewing licensees, such as: • Demographic info not collected by the respective licensing board • Practice setting • Educational attainment • Work status and future	**Licensed occupations:** • Advanced Practice Registered Nurse • Dental Hygienist • Dental Therapists • Dentists • Licensed Practical Nurse • Marriage & Family Therapists • Mental Health Counselors (LPCCs) • Pharmacists • Physical Therapist • Physical Therapist Assistant • Physician Assistants • Physicians (including Psychiatrists) • Registered Nurses	Online surveys are administered to licensees at the time they apply for or renew their professional license. For the last several years, MDH has gotten about a 50% response rate on their surveys (with slightly higher response rates among professionals with lower levels of education; e.g., nurses). Procedures are changing this year so that licensees will be presented with the online survey before they pay the fee for renewing their license.	• Contact Minnesota Department of Health, Office of Rural Health and Primary Care (MDH, ORHPC): 651-201-3838, or • Visit the MDH, ORHPC website to view data reports and fact sheets: www.health.state.mn.us/divs/orhpc/workforce/index.html	**Questions about current supply, such as:** • In what setting do most licensed healthcare professionals (e.g., pharmacists) work? • How long do they plan to continue practicing? • Who is practicing (age, gender, race, ethnicity)?

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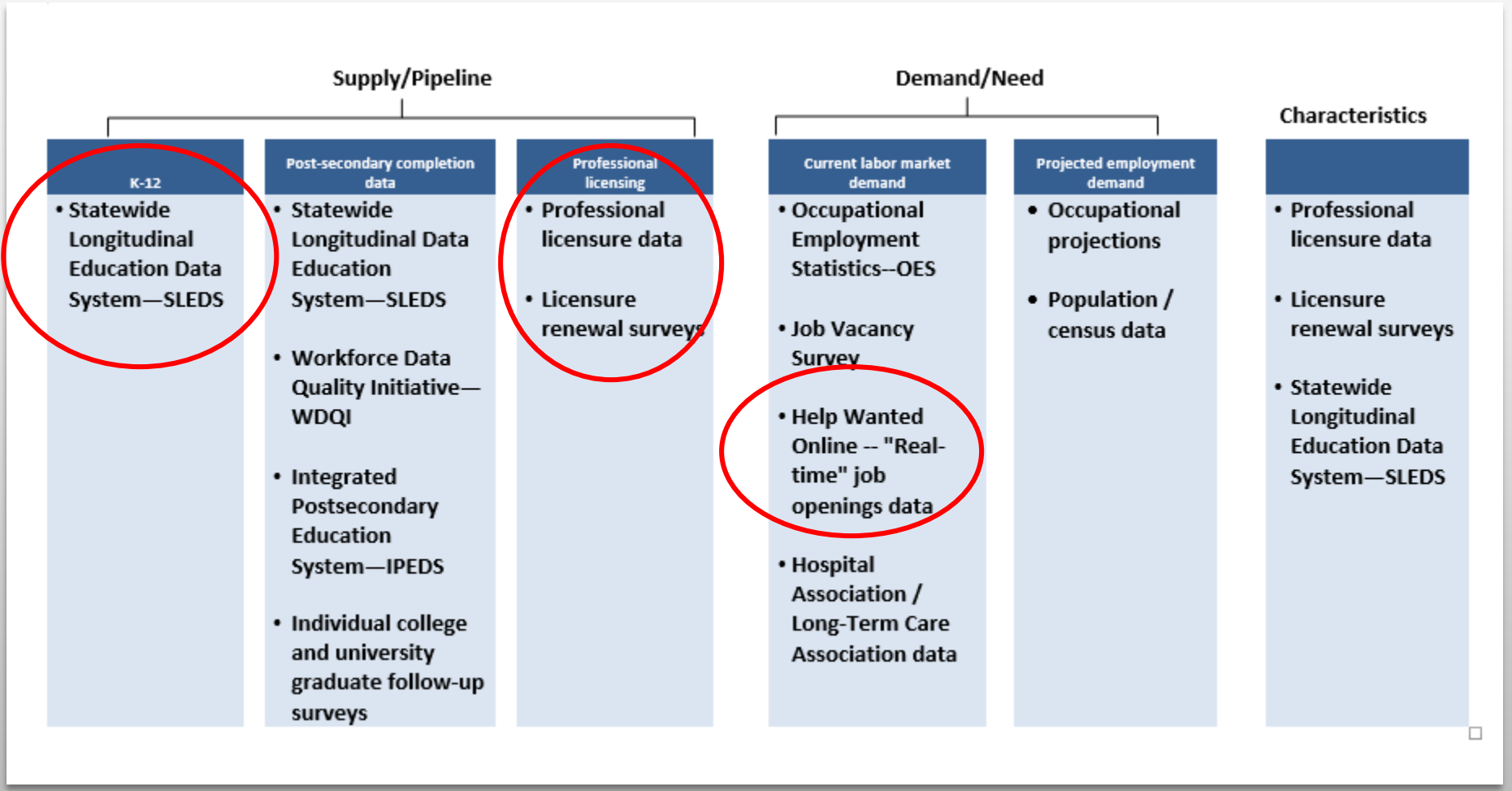
Overview of available healthcare workforce data



Health licensing board data

All state licensing boards collect and maintain some basic **administrative data** on their licensees: limited demographic, education, addresses, and any relevant complaint data.

State healthcare workforce surveys

26 states conduct surveys on their healthcare workforce, often as part of the license renewal process.

PROS

- Supplements health licensing board data.
- The only data source specifically designed to analyze healthcare workforce trends.
- Customizable, responsive to environmental changes.

CONS

- State-specific
- Rely on samples (not always populations) of healthcare providers
- Not all states have the infrastructure or the formal authority to collect this data.

State healthcare workforce surveys

HRSA Minimum Data Set (MDS) recommendations—to ensure consistent data collection across states

But, there are some additional considerations:

- State-level workforce policy needs
- Resource constraints

http://bhpr.hrsa.gov/healthworkforce/data/minimumdataset/minimumdataset.pdf

State healthcare workforce surveys

Minnesota's survey redesign:

- Reviewed all MDS questions across professions (and statutory responsibilities)
- Drafted a **master survey** that is consistent across all professions
- Gathered feedback from state and national stakeholders
- Revised
- Conducted cognitive testing on 20+ actual survey respondents
- Revised

  .

  .
- Revised, and revised again

State healthcare workforce surveys

“Are you actively working in a position that requires your license?”

(If no, respondents skip most of the survey questions)

Does not work for many mental health professions.

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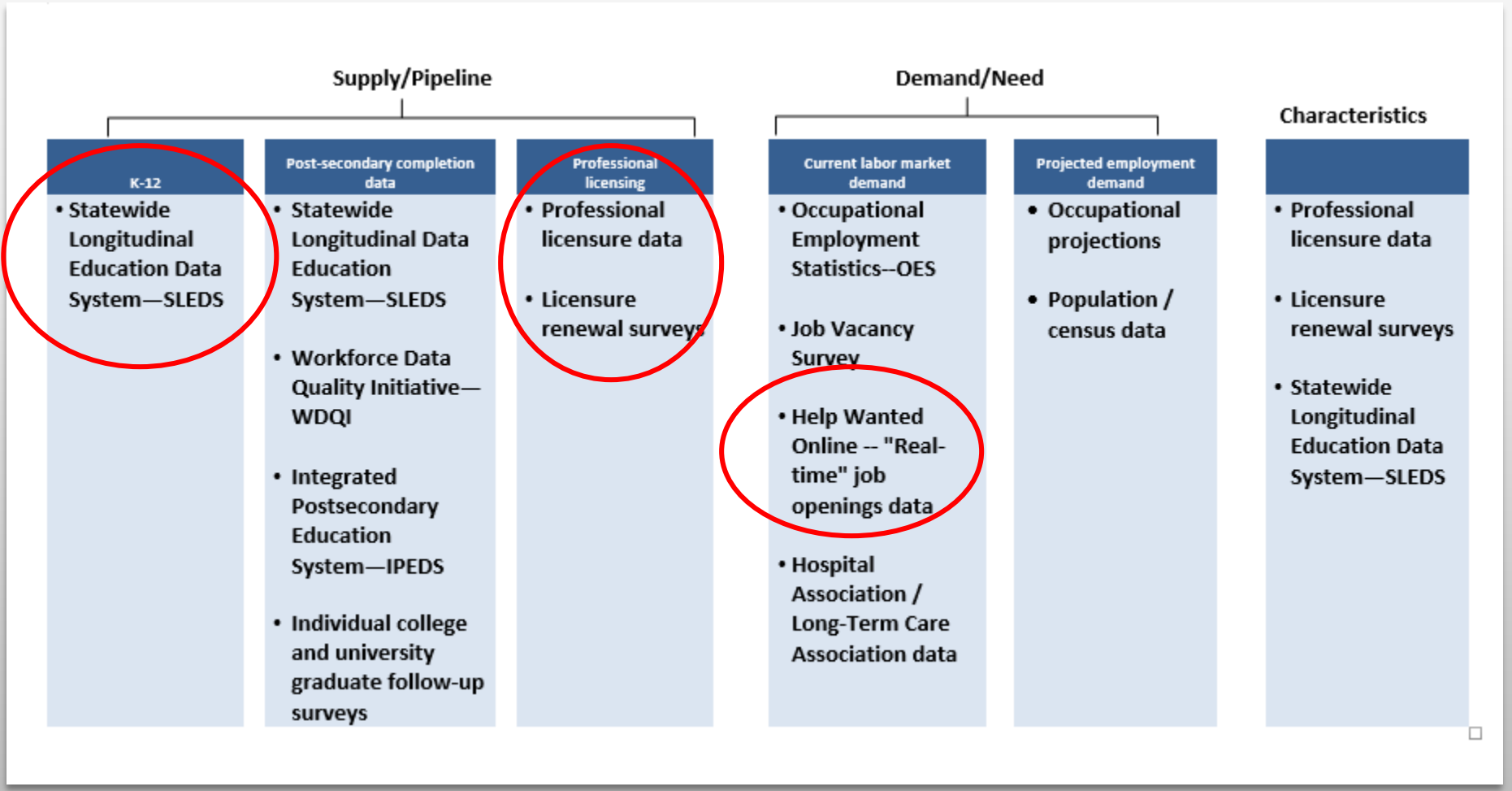
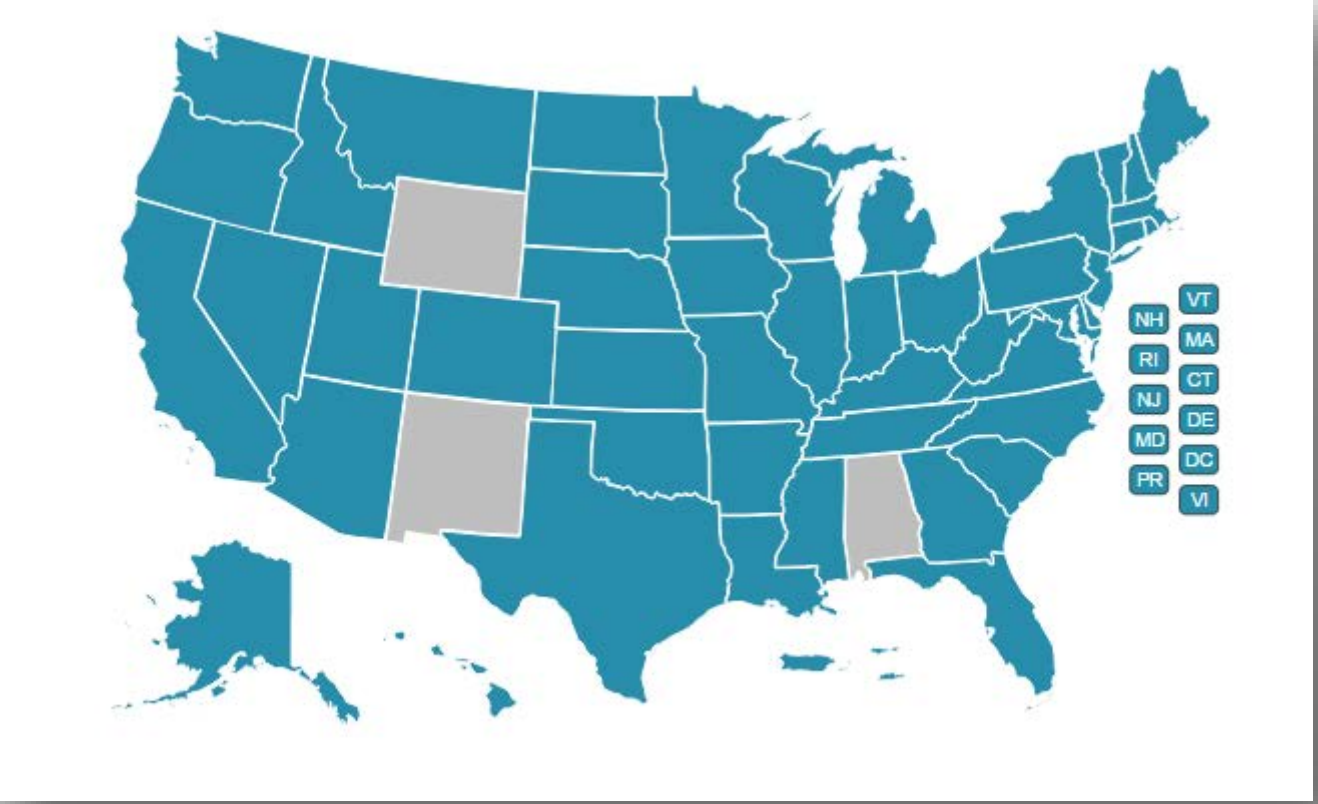


Statewide Longitudinal Educational Data System

- National Center for Education Statistics grants
- Multiple rounds of funding beginning in 2005
- 47 states have received at least one SLEDS grant



Statewide Longitudinal Educational Data System

Links K-12,

postsecondary,

and labor market data

all into a single record

Statewide Longitudinal Educational Data System

College Program	Number of 2010 Graduates	One year after graduation		Four years after graduation		Top industry employer
		Share of grads with MN wages	Median hourly wage	Share of grads with MN wages	Median hourly wage	
Clinical/Medical Laboratory Science/Research and Allied Professions	302	73%	$17.45	70%	$19.88	Health Care
Medicine	205	24%	$23.60	32%	$91.77	Health Care
Health Aides /Orderlies	55	51%	$12.14	82%	$17.68	Health Care
Registered Nursing, Nursing Administration, Nursing Research	3,813	77%	$29.17	75%	$34.98	Health Care

Statewide Longitudinal Educational Data System

What's missing from current SLEDS data?

Occupation
Licensure
Board certification / other specialty data

Additional employment characteristics:

- Full-part-time
- Patient care
- Board certification / other specialty data
- Work satisfaction
- Practice location(s)

Statewide Longitudinal Educational Data System

Minnesota received a 4-year grant to knit healthcare workforce data (licensing and survey data) into the existing SLEDS infrastructure, to answer questions like:

- What individual/geographic factors encourage program graduates to practice in rural areas?
- Under what conditions can mental health professionals transition up career ladders?
- How do female dentists' career trajectories differ from their male counterparts?

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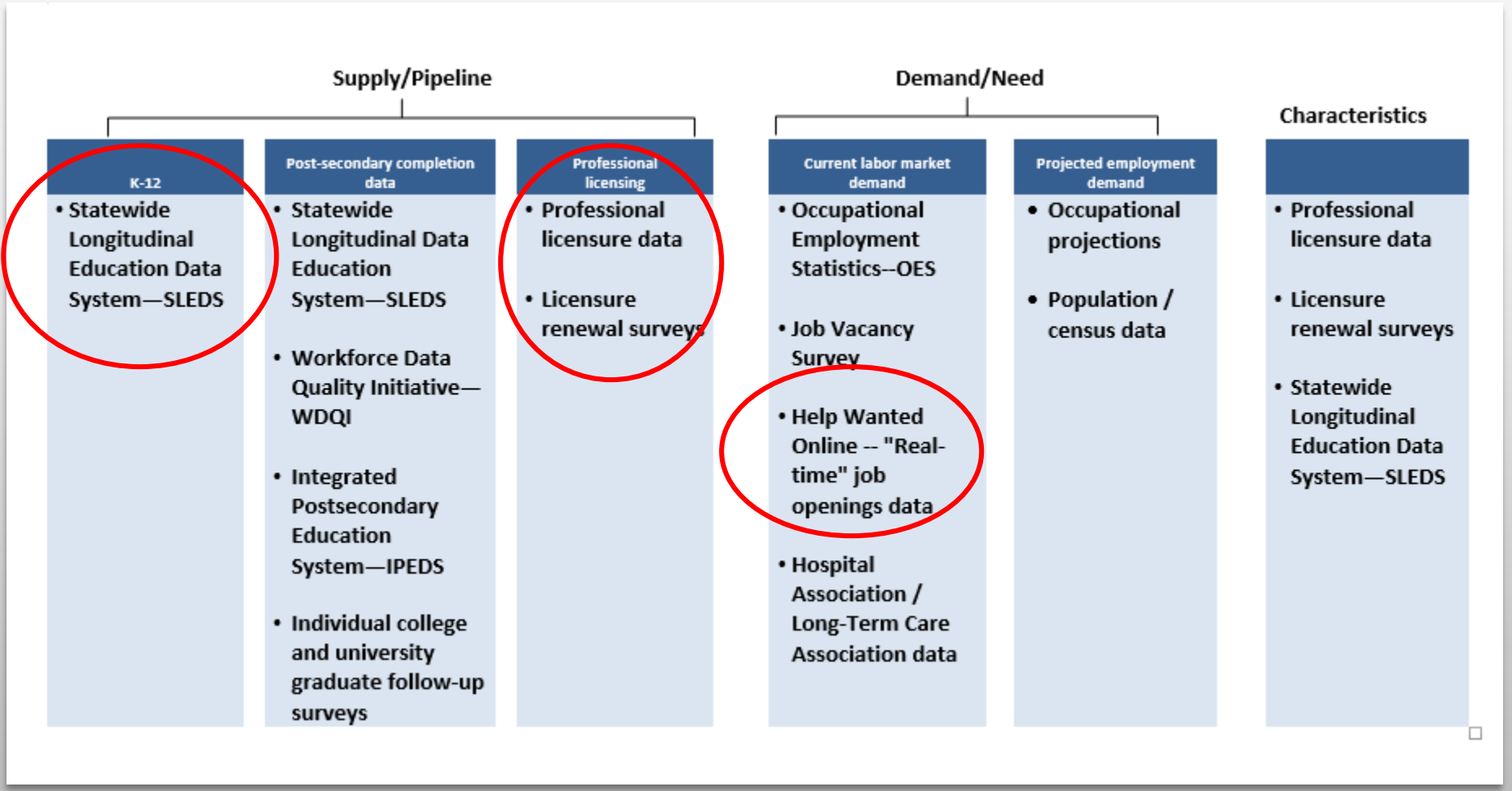
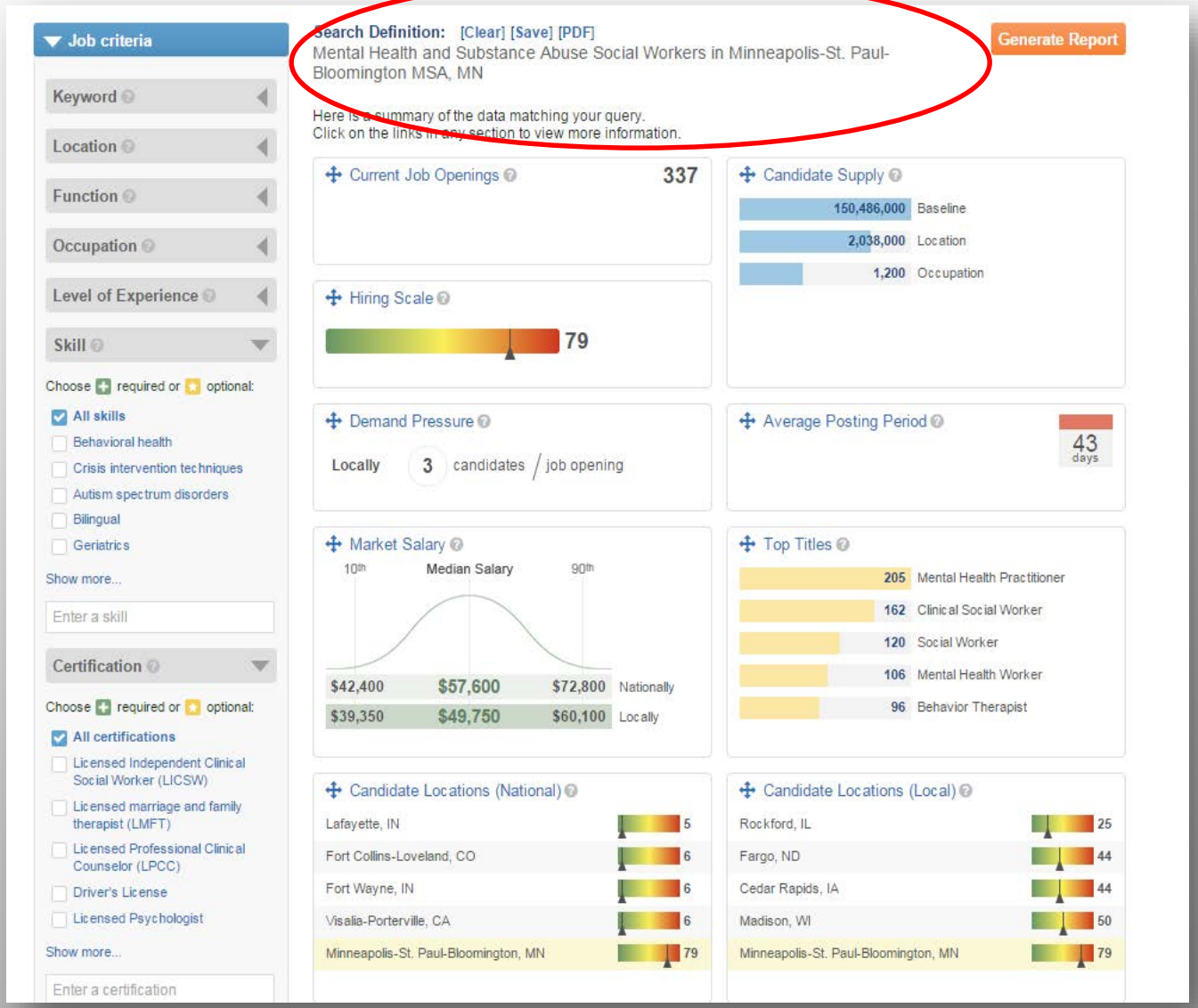


Help Wanted Online

- Private data source (requires a license to use)
- National online job board “scraper”
- Analyzes job postings for trends in market demand
- Increasingly used as a supplement to standard labor market indicators, such as unemployment for additional “real-time” labor market indicators

https://www.conference-board.org/data/helpwantedonline.cfm

Help Wanted Online



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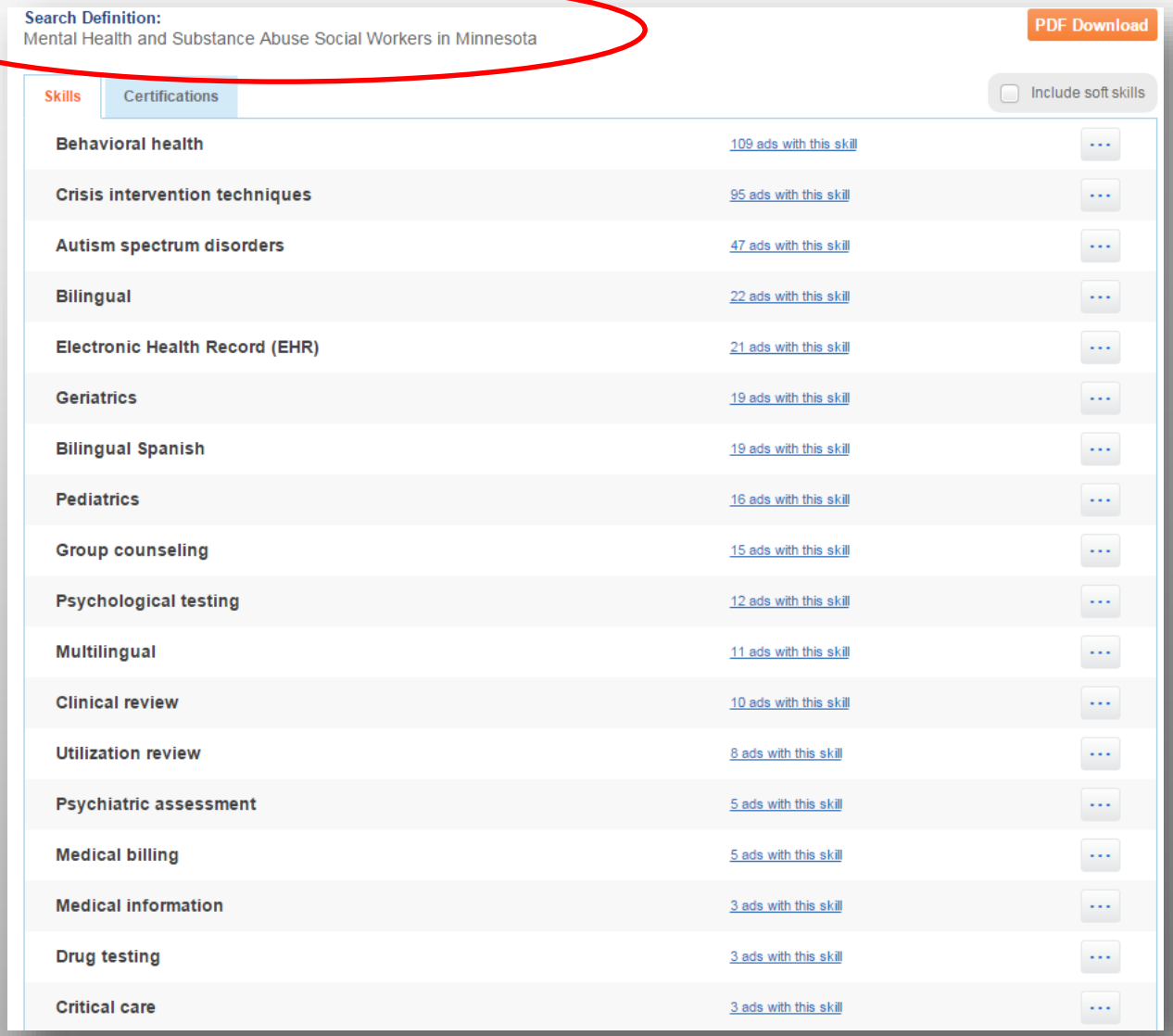

Help Wanted Online

Search Definition:
Mental Health and Substance Abuse Social Workers in Minnesota

PDF Download

Skills | Certifications

Licensed Independent Clinical Social Worker (LICSW)	218 ads with this certification
Licensed marriage and family therapist (LMFT)	130 ads with this certification
Licensed Professional Clinical Counselor (LPCC)	124 ads with this certification
Driver's License	100 ads with this certification
Licensed Psychologist	56 ads with this certification
Master Addictions Counselor (MAC)	29 ads with this certification
Licensed Clinical Social Worker (LCSW)	26 ads with this certification
Licensed Alcohol and Drug Counselor (LADC)	20 ads with this certification
First Aid certification	19 ads with this certification
Continuing Education (CE)	16 ads with this certification
Licensed Professional Counselor (LPC)	14 ads with this certification
Health and Fitness Specialist	8 ads with this certification
Substance Abuse Counselor	7 ads with this certification
Licensed Social Worker (LSW)	7 ads with this certification
Licensed Clinical Professional Counselor (LCPC)	7 ads with this certification
Marriage Family Therapist (MFT)	7 ads with this certification
ICD-10 / ICD-9	6 ads with this certification

Questions?
Discussion?

Contact Information

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