"RECRUITING AND RETAINING HEALTHCARE PROFESSIONALS FOR RURAL AREAS – WISCONSIN'S EXPERIENCE"

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Federal Advisory Committee on Interdisciplinary, Community-Based Linkages

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OUTLINE

- Background
- Wisconsin demographics
- Programs and Initiatives
- Recommendations

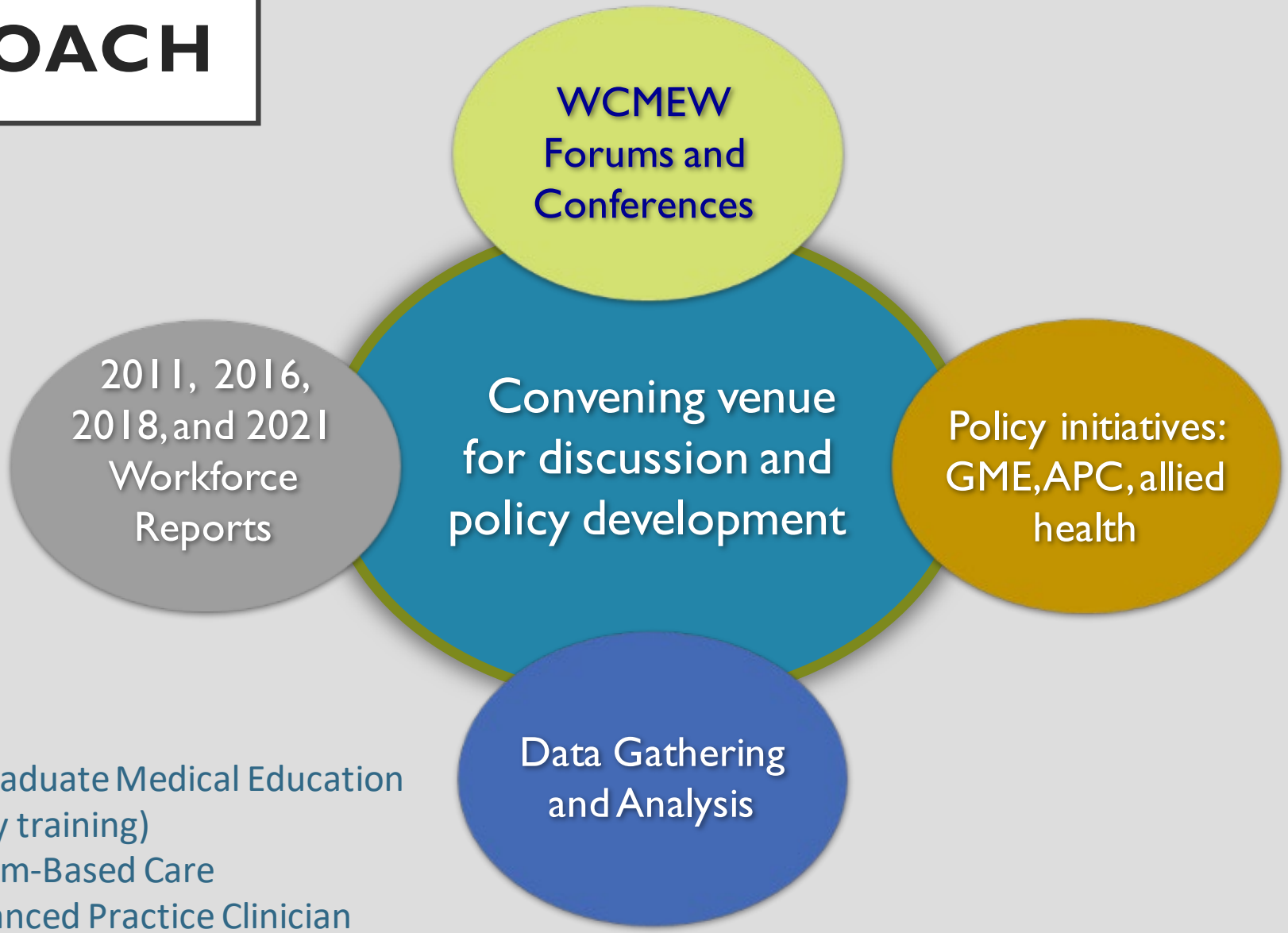
MEET WCMEW – OUR MISSION

The mission of the Wisconsin Council on Medical Education and Workforce (WCMEW) is to **ensure a healthcare workforce that meets the needs of Wisconsin citizens** by convening a wide breadth of stakeholders to:

- Help to create a comprehensive statewide healthcare workforce **strategic plan**, and provide ongoing monitoring of progress towards plan objectives.
- Work with Wisconsin's education and **training organizations** to promote an appropriate supply of healthcare practitioners.
- **Monitor changes** in care delivery, and encourage incorporation of those changes into education and training, and expansion of best practices.
- Promote ongoing **research, education, and communication** on workforce issues.

WCMEW APPROACH

WCMEW has been successful in bringing together a wide range of health care workforce stakeholders to **develop policies**, **inform the public**, and create **education programs**.



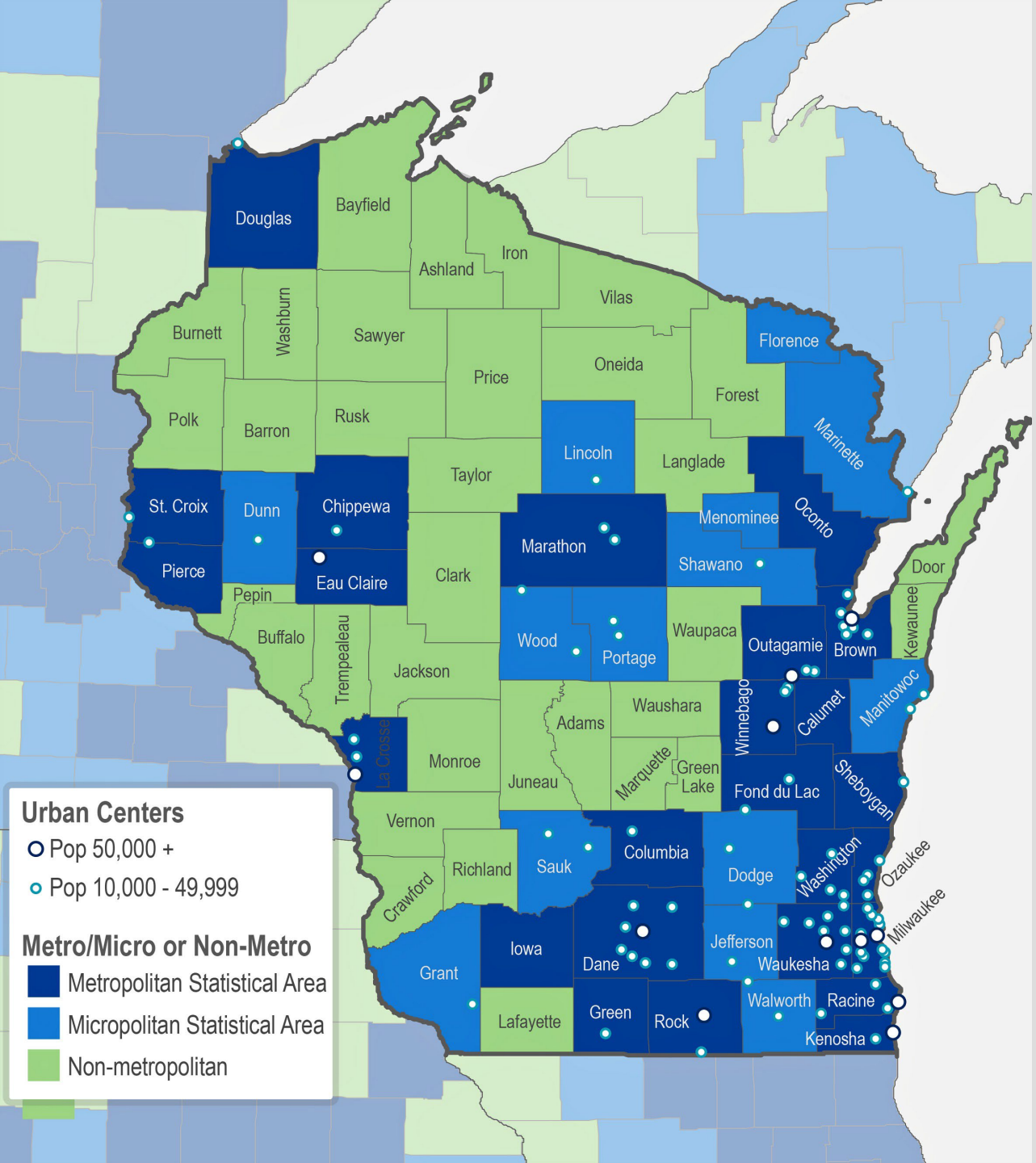
GME = Graduate Medical Education (residency training)
TBC = Team-Based Care
AC = Advanced Practice Clinician

WCMEW COUNCIL MEMBERS

- Wisconsin Academy of Family Physicians
- Wisconsin Nurses Association
- Marshfield Clinic Health System
- Wisconsin AHEC
- UW School of Medicine and Public Health
- Pharmacy Society of Wisconsin
- Wisconsin Hospital Association
- Rural Wisconsin Health Cooperative
- Wisconsin Medical Society
- Wisconsin Academy of Physician Assistants
- Wisconsin Center for Nursing

WCMEW ACTIVITIES

- **Ongoing Collaborations**
- Leadership Role in UW Center for Interprofessional Practice and Education and ICEP
- State of WI GME Grant Process
- Participating in advancing GME in Northern WI (WiNC) – Workforce Development Committee
- **Information Sharing**
- **Statewide workforce Summits 2014 through 2020**
- 2013 and 2016 Conferences on Graduate Medical Education
- Monthly Newsletters
- WCMEW Website
- Presentations to multiple audiences
- **Work Groups**
- **Task Force on Care Delivery**
- Clinical Training Sites Work Group
- Data Collaborative

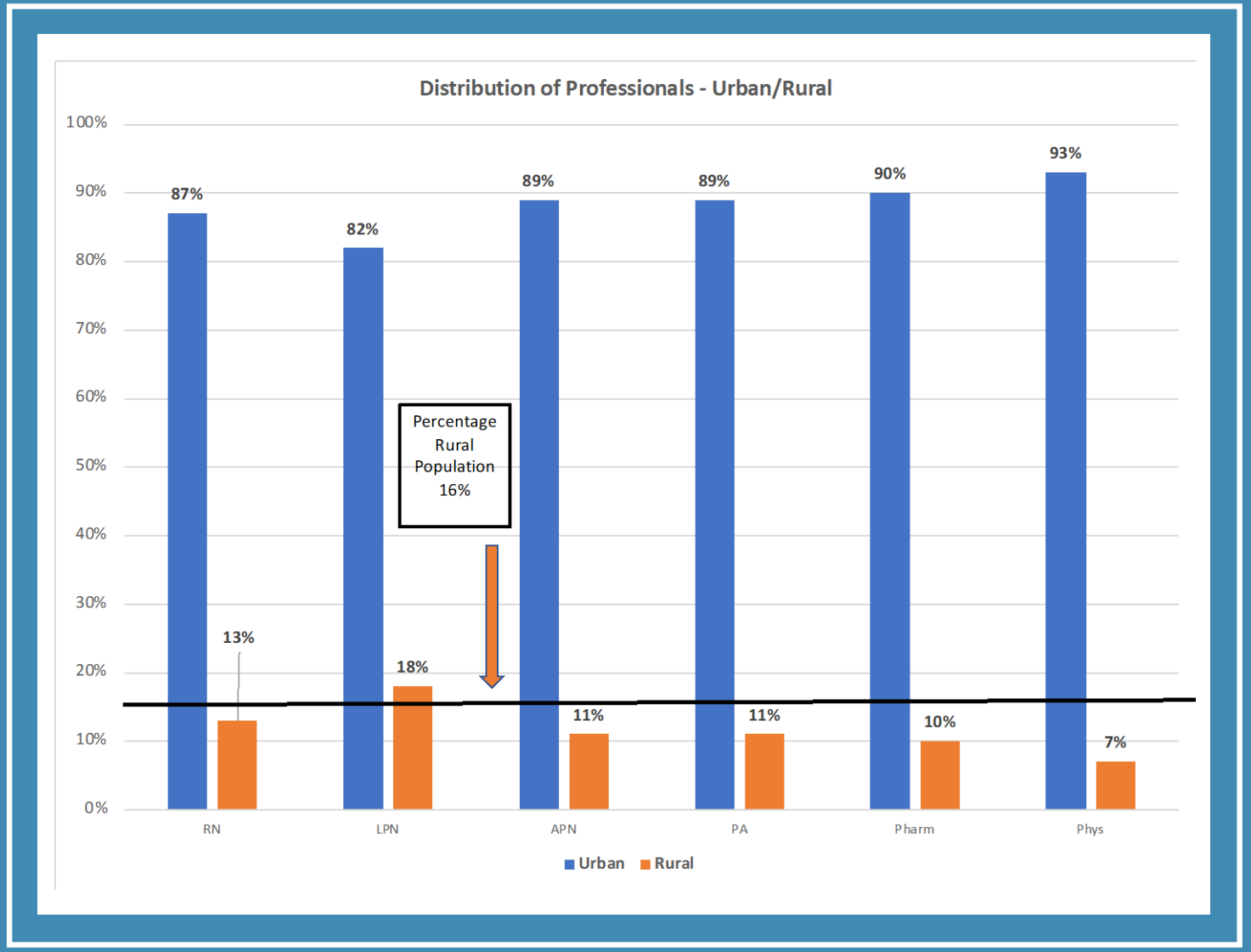


WISCONSIN INFO

- ✓2020 total population: 6 million; 1 million over age 65
- ✓Projected 2035 population: 6.5 million; 1.5 million over age 65

16% Live in Rural Areas

HEALTHCARE WORKFORCE DISTRIBUTION



WCMEW/WHA REPORTS, KEY RECOMMENDATIONS, AND ACTIONS

"Who Will Care for Our Patients: 2008 Update on 2004 WHA Report"

- Create an infrastructure to guide medical education in Wisconsin: ***WCMEW created in 2004***
- Enroll students in medical schools who will practice in Wisconsin: ***UW Med School establishes WARM and TRIUMPH***

"100 New Physicians a Year: an Imperative for Wisconsin" 2011 WHA Report

- Expand GME programs: ***New DHS GME grant programs created in statute***
- Open a satellite campus of an existing medical school**: MCW opens two new campuses in Northern WI**
- Increase the number of non-physician providers being trained in Wisconsin: ***New DHS APC grant programs***

"A Work in Progress: Building Wisconsin's Future Physician Workforce" 2016 WCMEW

- Understand future health care delivery: ***Annual WCMEW workforce summits***

"Mapping Our Way to Success" 2018 WCMEW

- Expand and increase coordination of clinical training sites: ***WCMEW forms Clinical Sites work group***

PROGRAMS AND RESULTS

- ✓ *In 2006, he University of Wisconsin School of Medicine and Public Health (SMPH) created two programs – one focusing on urban areas, called Training in Urban Medicine and Public Health (TRIUMPH), and the other named Wisconsin Academy for Rural Medicine (WARM). Both programs target potential students showing a desire and propensity for practicing in underserved areas. Since 2008, TRIUMPH has graduated 208 students, with 99% selecting residencies in urban areas. The WARM program admits 26 students a year; 91% are practicing in Wisconsin.*
- ✓ *In 2015, the legislature enacted a grant program, administered by the Wisconsin Department of Health Services, that provides start-up funds to hospitals that are either starting or expanding graduate medical education programs in underserved areas. Currently, 37 programs are graduating over 100 physicians per year; over 50% are practicing in Wisconsin.*
- ✓ *In 2016, the Medical College of Wisconsin established two new community-based medical school campuses, one in Wausau and one in Green Bay, each of which has a capacity to teach 25 students. In the MCW-Central Wisconsin's inaugural class, 11 came from central Wisconsin.*
- ✓ *2017 the legislature enacted a grant program providing funds to health systems that initiate new training programs for advanced practice providers (APCs). Thus far, 21 programs have been started. Retention information is not yet available.*
- ✓ *AHEC has had ongoing programs, such as: Wisconsin Express program since the mid 1990s. This program gives undergraduate and graduate health professions students a unique opportunity to become immersed in Wisconsin's diverse communities and cultures; Community Health Internship Program enables college students who have an interest in community health, public health and population health to work full time with local health departments, tribal health centers, community health centers and community service organizations.*

COLLABORATIVE EFFORTS

Wisconsin Collaborative for Rural GME

The Wisconsin Collaborative for Rural Graduate Medical Education (WCRGME) was established in 2012 to address the shortage of rural primary care physicians through the expansion of rural graduate medical education (GME). It is a network of organizations developing and maintaining rural residency rotations, rural training track residency programs, and rural fellowships.

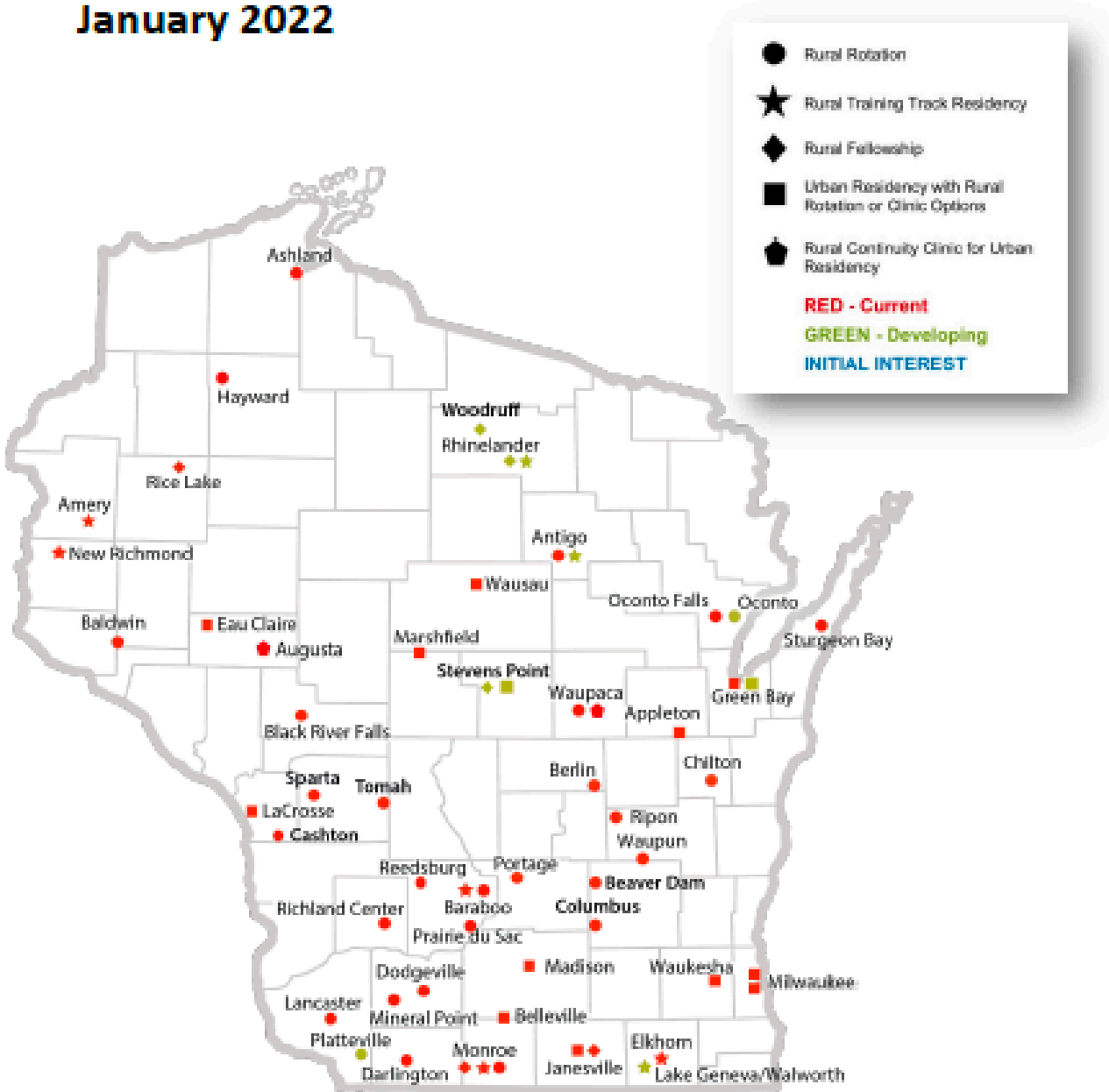
OUR MISSION & VISION STATEMENT

Vision: *Training rural doctors for rural people*

Mission: Addressing the rural shortage of primary care physicians through the expansion of rural graduate medical education.

WCRGME Active Sites –

January 2022



WCMEW'S 2021 WORKFORCE REPORT

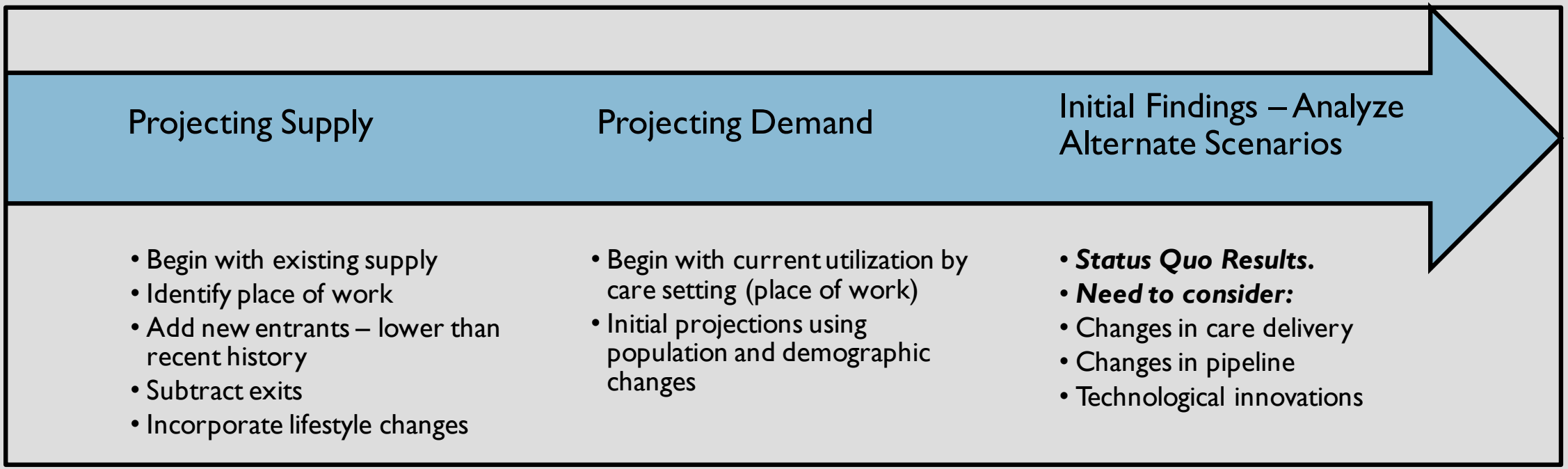
The 2021 report is the first to look at a broader range of healthcare professionals

THE FUTURE OF WISCONSIN'S HEALTHCARE WORKFORCE

The goal of the report is to:

- Understand the total numbers and distribution of Physicians, PAs, RNs, APNs, LPNs, and Pharmacist in Wisconsin.
- Develop a comprehensive model for forecasting supply and demand a broad range of health clinicians (status quo)
- Analyze scenarios that would modify status quo findings using potential changes in healthcare in Wisconsin.
- Report on the findings of the project, together with recommendations.

SUPPLY – DEMAND – ANALYSIS



The basic construct of the **status quo model** includes the following components and assumptions:

1. Population and demographics drive utilization
2. All services and practice sites (place of work) classified into a limited number of categories
3. Each profession's FTEs are apportioned/attributed to defined practice sites
4. All utilization is apportioned/attributed to service types
5. Education and training pipelines are identified for each profession and remain constant
6. Existing staffing/workforce practices remain the same

A KEY MODEL COMPONENT – **PROJECTED** POPULATION AND DEMOGRAPHICS

	Male			Female		
Age Group	2020	2035	% Change	2020	2035	% Change
0-19	772,770	806,085	4%	735,770	769,320	5%
20-44	950,905	978,740	3%	915,060	930,970	2%
45-64	783,095	752,460	-4%	783,550	730,060	-7%
65-74	304,185	348,010	14%	320,845	365,835	14%
75+	180,845	347,245	92%	258,055	447,545	73%
	2,993,820	3,234,575	8%	3,015,300	3,245,765	8%

Source: WI Dept of Administration; WCMEW Analysis

PROJECTED UTILIZATION CHANGES

Sources:

- Ambulatory care: CDC National Ambulatory Medical Care Survey 2010
- Home health: CDC National Study of Long-Term Care Providers 2016
- Hospital: WHAIC data 2019
- Long-term care: CMS Nursing Home Data Compendium 2015

Care Setting	Projected Utilization Change to 2035
Ambulatory Care	14%
Home Health	16%
Hospital	17%
LTC	57%

EXAMPLE: LONG-TERM CARE

- Source: 2016 CMS Long-term Care Compendium
- Note dramatic differences in utilization
- Over-65 population change

Impact on demand for LPNs:
- 43% work in LTC
- Leads to a 35% increase in demand
- Projected 26% decrease in supply
- Resulting deficit of 6,359

	2020			2035		
Age Range	Population	% Population NH Residents	Estimated WI NH Residents	Population	% Population NH Residents	Estimated WI NH Residents
Under 21	1,508,540	0.0%	-	1,575,405	0.0%	-
21 to 30	750,015	0.0%	21	758,510	0.0%	21
31 to 64	2,682,595	0.1%	2,017	2,633,720	0.1%	1,981
65 to 74	625,030	0.4%	2,803	713,845	0.4%	3,201
75 to 84	304,770	1.8%	5,585	570,545	1.8%	10,456
85 to 94	119,265	7.1%	8,516	203,440	7.1%	14,526
95+	14,865	15.4%	2,293	20,805	15.4%	3,210
Total	6,005,080	0.35%	21,236	6,476,270	0.35%	33,395
Percent Change						57.3%

WORKFORCE PROJECT – PRELIMINARY STATUS QUO FINDINGS

1. *Licensed professionals as of June 30, 2020. FTEs in direct patient care calculated for each profession.*
2. *New entrants: using 90% of the latest five-year trend projected to 2035.*
3. *Retirements and other attrition.*
4. *Using trends shown in the last decade.*
5. *Using care setting utilization projections and place of work. Physician projections: population utilization by specialty.*

	Registered Nurses	Licensed Practical Nurses	Advanced Practice Nurse Prescribers	Pharmacists	Physician Assistants	Primary Care Physicians	Medical Specialties	Surgical Specialties	Other Physicians	All Physicians	Totals
Supply											
2020 Supply (1)	60,822	10,409	6,671	5,907	2,695	4,687	3,777	3,130	2,593	14,187	100,691
New entrants, 2020-2035 (2)	36,539	6,253	7,565	3,270	2,474	2,561	2,091	1,863	513	7,029	63,129
Attrition, 2020-2035 (3)	(37,115)	(8,306)	(4,069)	(1,890)	(1,195)	(2,109)	(1,473)	(1,443)	(804)	(5,829)	(58,404)
Change in work patterns (4)	(3,602)	(617)	(527)	(340)	(191)	(522)	(422)	(360)	(224)	(1,528)	(6,804)
Projected supply, 2035	56,644	7,740	9,640	6,947	3,783	4,617	3,972	3,191	2,079	13,859	98,613
Total Change, 2020-2035	(4,178)	(2,669)	2,969	1,040	1,088	(70)	195	61	(514)	(328)	(2,078)
% change, 2020-2035	-7%	-26%	45%	18%	40%	-1%	5%	2%	-20%	-2%	-2%
Demand											
2020 Demand	60,822	10,409	6,671	5,907	2,695	4,787	3,870	3,130	2,593	14,379	100,883
Projected demand, 2035 (5)	72,575	14,099	7,809	6,933	3,120	5,706	4,841	3,537	2,927	17,011	121,547
Total change, 2020-2035	11,753	3,690	1,138	1,026	425	919	971	407	334	2,632	20,664
% change, 2020-2035	19%	35%	17%	17%	16%	19%	25%	13%	13%	18%	20%
Adequacy of Supply, 2035											
Total Projected Supply minus Demand	(15,931)	(6,359)	1,831	14	663	(1,088)	(869)	(346)	(849)	(3,152)	(22,935)

OK, BUT WHAT IF THINGS CHANGE IN THE NEXT 15 YEARS?

WORKFORCE PROJECT – PRELIMINARY STATUS QUO FINDINGS

INITIAL THOUGHTS AND FURTHER ANALYSIS

The status quo projects deficits in supply for registered nurses, licensed practical nurses, and all physician specialties, while surpluses are projected for advanced practical nurses, physician assistants, and pharmacists.

Note that these are *status quo* results, reflecting current patient utilization and professional workflows. To arrive at a set of findings with some level of confidence, however, we need to consider changes that are likely to take place over the next 15 years, including:

EVALUATING LIKELY CHANGES IN CARE DELIVERY

Several factors could influence new entrants and attrition, including for example: how future prospective healthcare workers view the profession; average retirement age; and whether trends in work/home life choices will continue at the same rate as the past decade.

The status quo results reflect current utilization by care setting and demographics, which will likely change over the next 15 years, as it has in the past.

Demand for each profession reflects current place of work by care setting projected into the future; duties and responsibilities are likely to change and shift between the professions.

WILL THERE BE A SURPLUS OF APCS AND PHARMACISTS?

Factors to consider:

- *Demonstrated Ability of Our Healthcare System to Adapt and Change*
- *Technology as a Facilitator of Change - accelerates changes in workflow and enhances communications*
- *The Regulatory Environment – flexibility during COVID: temporary or permanent?*
- *Constantly Evolving roles for APCs & Pharmacists*

GROWTH IN ACTIVE LICENSES/HOSPITAL EMPLOYMENT

- DSPS Active License Counts
- Period from 2014 to 2021
- APN total growth was 58%
- PA total growth was 49%
- Pharmacist growth: 10%
- By comparison, growth in active physician licenses was 4%

Active Licenses and Ratios	2014	2021	Percent Change
APN	4,331	6,850	58%
PA	2,071	3,079	49%
Pharmacists	5,845	6,423	10%
Physicians	15,899	16,508	4%

Hospital Employment	2014	2019	Percent Change
APN	478	1,240	160%
PA	304	636	109%
Pharmacists	1,268	1,568	23%

Source: DSPS; WCMEW analysis; MGMA 2019 survey

IMPACT OF TELEMEDICINE

- How is telemedicine used?
- What are the benefits?
- What is the impact on workforce?

Healthcare Interaction	Modality	Perceived Benefits
Patient visits	*Synchronous*	• *More focused visits/engaged patients* • *Shorter times for many types of visits* • *Improved access in rural areas* • *Facilitates documentation* • *Patients avoid travel and waiting times*
Triage	*Synchronous*	• *Reduces ER visits* • *Reduces SNF stays*
E-consultations	*Synchronous and asynchronous*	• *Avoids unnecessary referrals* • *Reduces referral timeframes*
Communicating results to patients	*Synchronous and asynchronous*	• *Facilitates patient follow up* • *Reduces appointment no-shows*
Managing chronic disease and preventive care	*Remote patient monitoring*	• *Increases patient compliance with treatment guidelines* • *Fewer hospital admissions* • *Better long-term outcomes*

Source: WCMEW review of literature

KEY TAKEAWAY:

- *DATA AND A NUMBER OF STUDIES ARE AVAILABLE, BUT THE FINDINGS ARE NOT DEFINITIVE AND MIXED – UNABLE TO MODEL – MORE STUDY NEEDED*

PIPELINE QUESTIONS

- Programs: We have schools and programs across the six disciplines included in our study. Do they meet our current needs? Future needs?
- Seats: Is there sufficient capacity (current and future needs)?
- Sites: Is there enough clinical training capacity (sites, teachers, etc.)?
- Will there be enough applicants in the population?
- Are we a net importer or exporter of trained clinicians?

PIPELINE VERSUS NEEDED

- *Annual entrants needed includes increases in demand, lifestyle changes, and attrition.*
- *Annual graduates: information from schools and programs. Physicians include GME grads.*
- *Percent retained: obtained from schools, programs,AAMC. Additional physician retention from GME grant program.*

Comparing 2020 with 2035	Current or Needed in 2035	Graduates from WI Schools/ Programs	Percent Retained	Number Retained	Need to Import or Expand in WI
2035 Projected Totals	6,211	4,402	61%	2,683	3,528
2020 Estimated Totals	4,672	4,327	61%	2,627	2,045
Difference	1,539	75	0	56	1,483

WCMEW'S RECOMMENDATIONS FOR WISCONSIN

1. Education and training resources for all of the professions in our study need to be expanded or modified, including for example, the number of available openings, faculty, and clinical sites.
2. Continue to expand the Department of Health Services grants for Graduate Medical Education and Advanced Practice Providers.
3. Inventory the number and capacity of clinical training sites; identify and help disseminate best practices in clinical experiences, including, for example, enhancing partnerships with communities.
4. Explore in greater depth the impact that telemedicine is having on care delivery; ensure incorporation of telemedicine in healthcare education and training.
5. Gain a better understanding of the nature and extent of care delivery changes.
6. Carry out a retrospective study of the long-term effects of the pandemic.
7. Evaluate the feasibility of gathering workforce data on a more consistent and timelier basis.

WCMEW'S RECOMMENDATIONS FOR HRSA

1. Provide incentives for states to create organizations like WCMEW.
2. Sponsor annual conferences where state-level experiences can be shared.
3. Provide funding for studies of the impact of technology and team-based care on the healthcare workforce.
4. Provide funding for collaboratives that create training programs for advanced practice clinicians.
5. Create an innovation center that would serve as a resource for organizations studying collaborative, community-based clinical education and training.

DISCUSSION