NORTHWEST HEALTHCARE Response Network

PREPARE. RESPOND. RECOVER.

Responding to COVID-19

Seattle City Council Briefing

April 13, 2020

Objectives

- About Northwest Healthcare Response Network
- Building blocks of medical surge planning
  - Hospital/health system
  - Regional
- Considerations as we move forward

The Challenge We Face

- U.S. healthcare system based on independent, competing marketplace of providers (no central planning)
- Pandemics overwhelm individual providers, counties, regions, states
- Successful response requires effective collaboration
  - Public Health works to prevents spread of disease
  - Clinical health works to treat disease

About the Network

We lead regional healthcare collaboration to effectively respond to and recover from emergencies and disasters.

We are part of a disaster response system

Many agencies and partners supporting healthcare readiness and surge planning:

- Governor's Office
    - Vice Admiral Dr. Raquel Bono, Director for COVID-19 Health System Response Management
- WA Department of Health and Washington Emergency Management Division
- Washington State Hospital Association and numerous other provider and health care associations and groups
- Healthcare Coalitions
- Healthcare organizations and providers and emergency medical services
- Local public health and emergency management
- And many others!

Overarching State framework for surge

- Strategies to support hospitals and healthcare organizations in maximizing
  - Space
  - Staff
  - Supplies
- Response coordination across coalitions and the state
  - Situational awareness
  - Resource sharing
  - Bed management
- Clinical guidelines for patient care during surge and resource scarcity
- Policies to support these activities

Work we are doing

- Providing situational awareness about hospital capacity and resource needs across the region by gathering and sharing information
- Convening clinical leaders, clinical advisory committees and subject matter experts to develop statewide guidance and tools to support implementation of medical surge strategies
- Convening healthcare and public health practitioners across the region to share best practices, identify gaps and coordinate on solutions
- Supporting state and local medical surge solutions, such as regional planning coordination Regional COVID Coordination Center (RC3) with UW Medicine

NWHRN COVID-19 Response: Situational Awareness

Providing situational awareness about hospital capacity and resource needs across the region to provide common operating picture and decisional support

- Daily hospital situational awareness tracker (in partnership with WSHA)
  - *Key resources (examples)*
    - PPE
    - ICU and other bed availability
    - Ventilators
- Future statewide launch by DOH of additional dashboards and tools

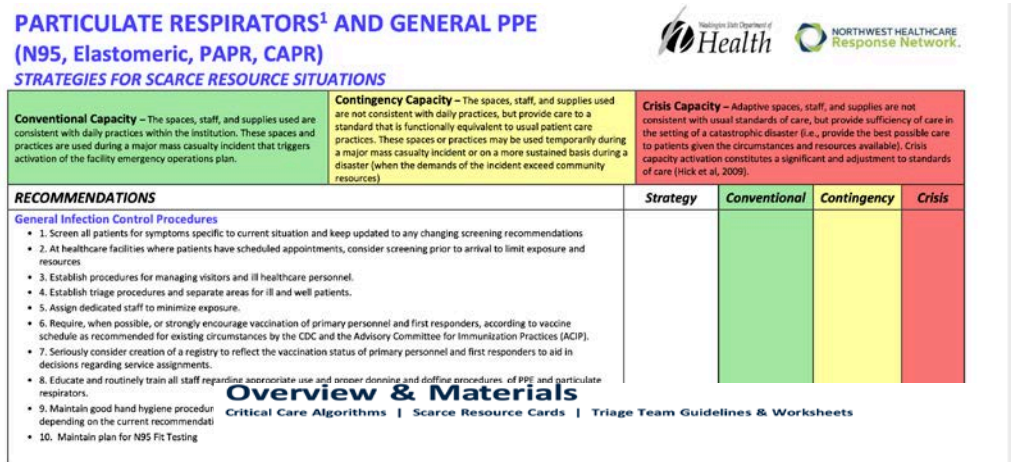
Patients Hospitalized and in the Intensive Care Unit (ICU) with Laboratory-Confirmed COVID-19

Date	Hospitals Reporting	Total Patients Hospitalized with COVID-19	Total Patients in the ICU with COVID-19
4/3/2020	67	596	222
4/4/2020	52	574	174
4/5/2020	50	581	178
4/6/2020	78	638	191
4/7/2020	82	641	190
4/8/2020	86	655	186

NWHRN COVID-19 Response: Developing clinical guidelines and tools to support surge

Providing standardized clinical guidance and resources to support healthcare providers with surge management

- WA DOH State Disaster Medical Advisory Committee and Disaster Clinical Advisory Committee
- Guidelines and clinical tools to support surge:
  - Conservation and mitigation strategies
  - Scarce resource management



PARTICULATE RESPIRATORS[1] AND GENERAL PPE
(N95, Elastomeric, PAPR, CAPR)
STRATEGIES FOR SCARCE RESOURCE SITUATIONS

Health | NORTHWEST HEALTHCARE Response Network.

Conventional Capacity – The spaces, staff, and supplies used are consistent with daily practices within the institution. These spaces and practices are used during a major mass casualty incident that triggers activation of the facility emergency operations plan.	**Contingency Capacity** – The spaces, staff, and supplies used are not consistent with daily practices, but provide care to a standard that is functionally equivalent to usual patient care practices. These spaces or practices may be used temporarily during a major mass casualty incident or on a more sustained basis during a disaster (when the demands of the incident exceed community resources)	**Crisis Capacity** – Adaptive spaces, staff, and supplies are not consistent with usual standards of care, but provide sufficiency of care in the setting of a catastrophic disaster (i.e., provide the best possible care to patients given the circumstances and resources available). Crisis capacity activation constitutes a significant and adjustment to standards of care (Hick et al, 2009).

RECOMMENDATIONS	***Strategy***	***Conventional***	***Contingency***	***Crisis***
General Infection Control Procedures • 1. Screen all patients for symptoms specific to current situation and keep updated to any changing screening recommendations • 2. At healthcare facilities where patients have scheduled appointments, consider screening prior to arrival to limit exposure and resources • 3. Establish procedures for managing visitors and ill healthcare personnel. • 4. Establish triage procedures and separate areas for ill and well patients. • 5. Assign dedicated staff to minimize exposure. • 6. Require, when possible, or strongly encourage vaccination of primary personnel and first responders, according to vaccine schedule as recommended for existing circumstances by the CDC and the Advisory Committee for Immunization Practices (ACIP). • 7. Seriously consider creation of a registry to reflect the vaccination status of primary personnel and first responders to aid in decisions regarding service assignments. • 8. Educate and routinely train all staff regarding appropriate use and proper donning and doffing procedures of PPE and particulate respirators. • 9. Maintain good hand hygiene procedur depending on the current recommendati • 10. Maintain plan for N95 Fit Testing				

Overview & Materials
Critical Care Algorithms | Scarce Resource Cards | Triage Team Guidelines & Worksheets

Washington State Department of Health
NORTHWEST HEALTHCARE Response Network.

NWHRN COVID-19 Response: RC3

Provide regional coordination and support to implement Regional COVID Coordination Center(RC3)

- Regional COVID Coordination Center (RC3)
  - Administered by UW Medicine - Harborview Medical Center
  - Established based on the Disaster Medical Coordination Center model to triage and place COVID-19 patients requiring acute emergency department or inpatient hospital care in an equitable manner.
  - Designed to balance patient placement and transport to individual or multiple hospitals with sufficient capacity in order not to strain the resources of any single hospital or small group of hospitals.
  - Collaboration with and local health systems and organizations

NWHRN COVID-19 Response: RC3 support

Provide regional coordination and support to implement Regional COVID Coordination Center(RC3)

- NWHRN augments support to RC3 during response and surge events by providing:
  - Support for situational awareness
  - Convening healthcare organizations or partner organizations
  - Facilitating mutual aid and resource sharing across organizations
  - Coordination with state and local public health and emergency management

Moving forward

- Working with state and local partners on more enhanced efforts to support long term care
- Ongoing support of state efforts around surge planning solutions
- Continue to refine planning tools and incorporate emerging best practices
- Keep planning for future peaks by incorporating what's working now while we build capabilities

Thank you

Onora Lien, Executive Director
Northwest Healthcare Response Network

NORTHWEST HEALTHCARE Response Network

Coronavirus Disease 2019 (COVID-19): Surge Planning

Seattle City Council
4/13/2020

Timothy H. Dellit, MD
Chief Medical Officer, UW Medicine
President, UW Physicians

UW Medicine

UW Medicine COVID-19 Response

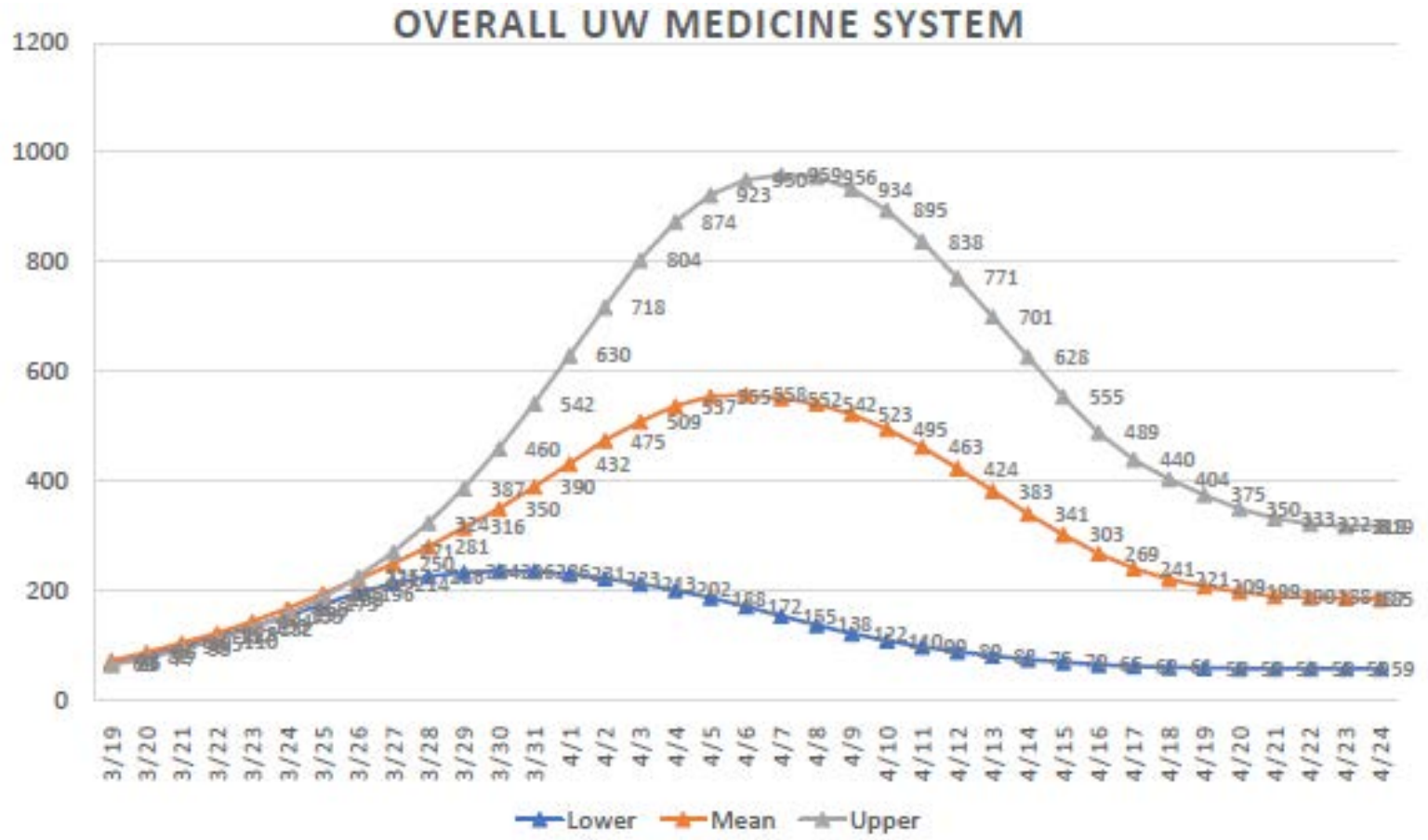
- Partnerships:
  - Local public health jurisdictions
  - Washington State Department of Health
  - Northwest Healthcare Response Network
  - Washington State Hospital Association
- System-wide incident command structure
- Maintain the well-being and health of our workforce
- Personal Protective Equipment (PPE)
- Clinical Virology Laboratory test development
- Testing clinics (drive through for employee and patients)
- Increase telehealth capacity

Surge Planning

- Modeling with Institute for Health Metrics and Evaluations (IHME)
- Identify surge targets
  - Bed capacity
  - ICU beds
  - Staffing
  - Equipment (ventilators, PPE)
- Cancel elective and non-urgent surgeries and procedures
- Triage sites (tents outside emergency departments)
- Alternative sites of care
- Vulnerable populations
- Conventional → Contingency → Crisis

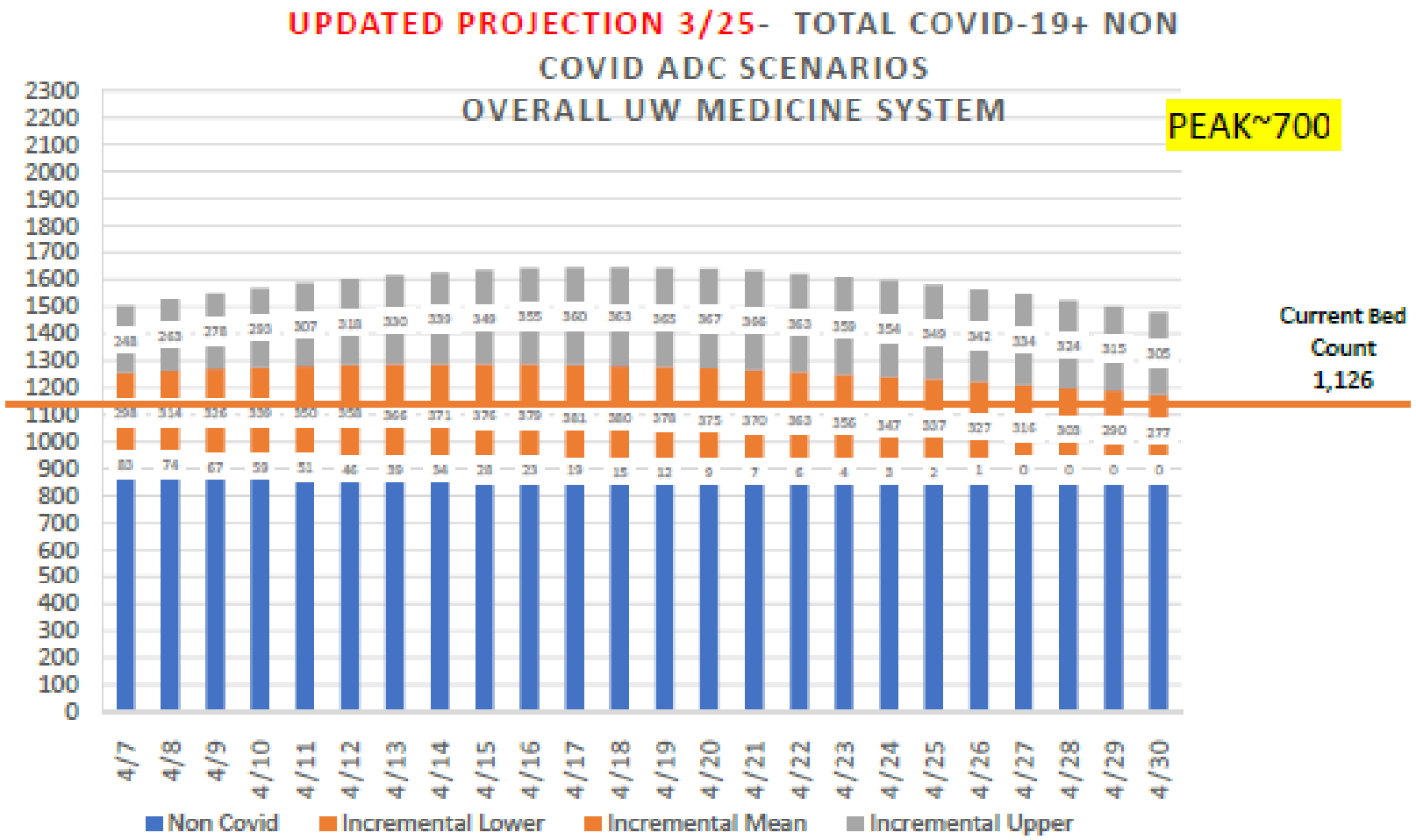
Projected Need for Surge Bed Capacity

Original IHME modeling for UW Medicine on March 18, 2020
Potential surge of additional 960 patients



Projected Need for Surge Bed Capacity

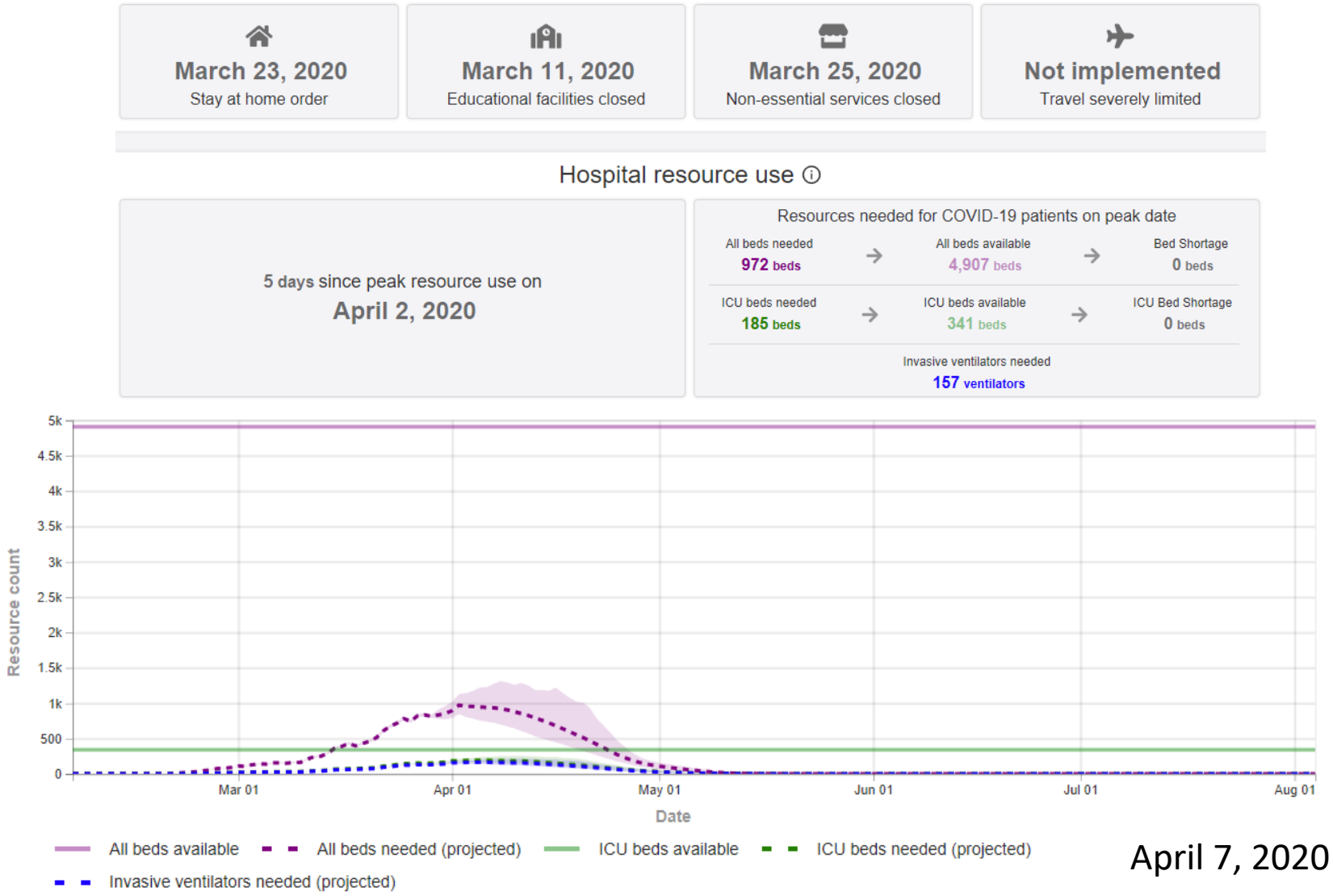
A week later…



Institute for Health Metrics and Evaluation (IHME)

April 2, 2020

Institute for Health Metrics and Evaluation (IHME)



April 7, 2020

Surge Planning Tool

Continuum of Care Definitions for Crisis Standards of Care	Conventional Capacity - the spaces, staff and supplies used are consistent with daily practices within the institution. These spaces and practices are used during a major mass casualty incident that triggers activation of the facility emergency operations plan.		Contingency Capacity - The spaces, staff and supplies used are not consistent with daily practices, but provide care to a standard that is functionally equivalent to usual patient care practices. These spaces or practices may be used temporarily during a major mass casualty incident or on a more sustained basis during a disaster (when the demands of the incident exceed community resources).			Crisis Capacity - Adaptive spaces, staff, and supplies are not consistent with usual standards of care, but provide sufficiency of care in the setting of a catastrophic disaster (i.e. provide the best possible care to patients given the circumstances and resources available). Crisis capacity activation constitutes a significant and adjustment to standards of care.				
	Phase 0	**Phase 1**	**Phase 2**			**Phase 3**				
Bed type = ICU, Acute Care or ED **Clinical Infrastructure** = medical gases, emergency power (i.e. PACU, IR, OR)	Normal ADC by bed type (ICU/Acute Care) prior to March 2020	90% full to set up beds by total and/or by type of bed	When Phase 1 is 90% full, surge into a location that has clinical infrastructure, not part of the staffed bed count			When Phase 2 is 90% full, surge into a location with no existing clinical infrastructure (no med gases, emergency power, etc)				
	No additional beds/equipment needed to support this Phase	**No additional beds/equipment needed to support this Phase**	**ICU Beds**	**Acute Care Beds**	**ED**	**ICU Beds**		**Acute Care Beds**		**ED**
			Number of beds: Department: Department #:	Number of beds: Department: Department #:		Number of beds: Department: Department #:		Number of beds: Department: Department #:		
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Incremental staffing in each location by Phase for a 24 hour period of time. ***CNO agreed upon and approved ratios only.***			**Total ICU Beds**		**Total Acute Care Beds**		**Total ICU Beds**		**Total Acute Care Beds**	
INCREMENTAL STAFFING	ICU RN									
	Acute Care RN									
	PCT/HA									
	Trained Observer/Dofficer									
	ED RN									
	Triage RN									
	ED PCT									
	Respiratory Therapy									
	EVS									
	Lab									
	Pharmacy									
	Food and Nutrition									
	Radiology									
EQUIPMENT	Bed									
	Stretcher									
	Non-Invasive Ventilators									
	Transport Vents									
	Invasive Vents									
	Anesthesia machines									
	Bipap									
	Alaris pumps									
	Cardiac Monitors									
	Tele									
	Oxygen regulator									
	RA regulator									
	Suction									
	Isolation carts									
	Oxygen tanks									
	Glidescopes									
	Ultrasounds, Point of Care									
	Handheld Ultrasounds									
	Portable CT									
	Thermometers									
	Vital Signs Monitors									
	ED Triage Tent									
	Pyxis/Automated Dispensing Cabinet									
	Glucometers									
	WOWs									

UW Medicine Surge Bed Capacity Planning

Target Calculation

		Additional Beds to be Added			
UWM-NW	**Starting Bed Count**	**Phase 1**	**Phase 2**	**Phase 3**	**Total**
ICU	15	0	32	0	47
All Non-ICU	126	0	55	36	217
Total	141	0	87	36	264
UWM-ML		**Phase 1**	**Phase 2**	**Phase 3**	
ICU	79	0	47	20	146
All Non-ICU	306	0	99	34	439
Total	385	0	146	54	585
HMC		**Phase 1**	**Phase 2**	**Phase 3**	
ICU	89	0	41	51	181
All Non-ICU	253	0	53	90	396
Total	342	0	94	141	577
VMC		**Phase 1**	**Phase 2**	**Phase 3**	
ICU	30	0	17	10	57
All Non-ICU	150	0	50	14	214
Total	180	0	67	24	271
	1,048	-	**394**	**255**	**1,697**

Questions?