

Bamlanivimab infusion service for Covid patients in a small rural health system

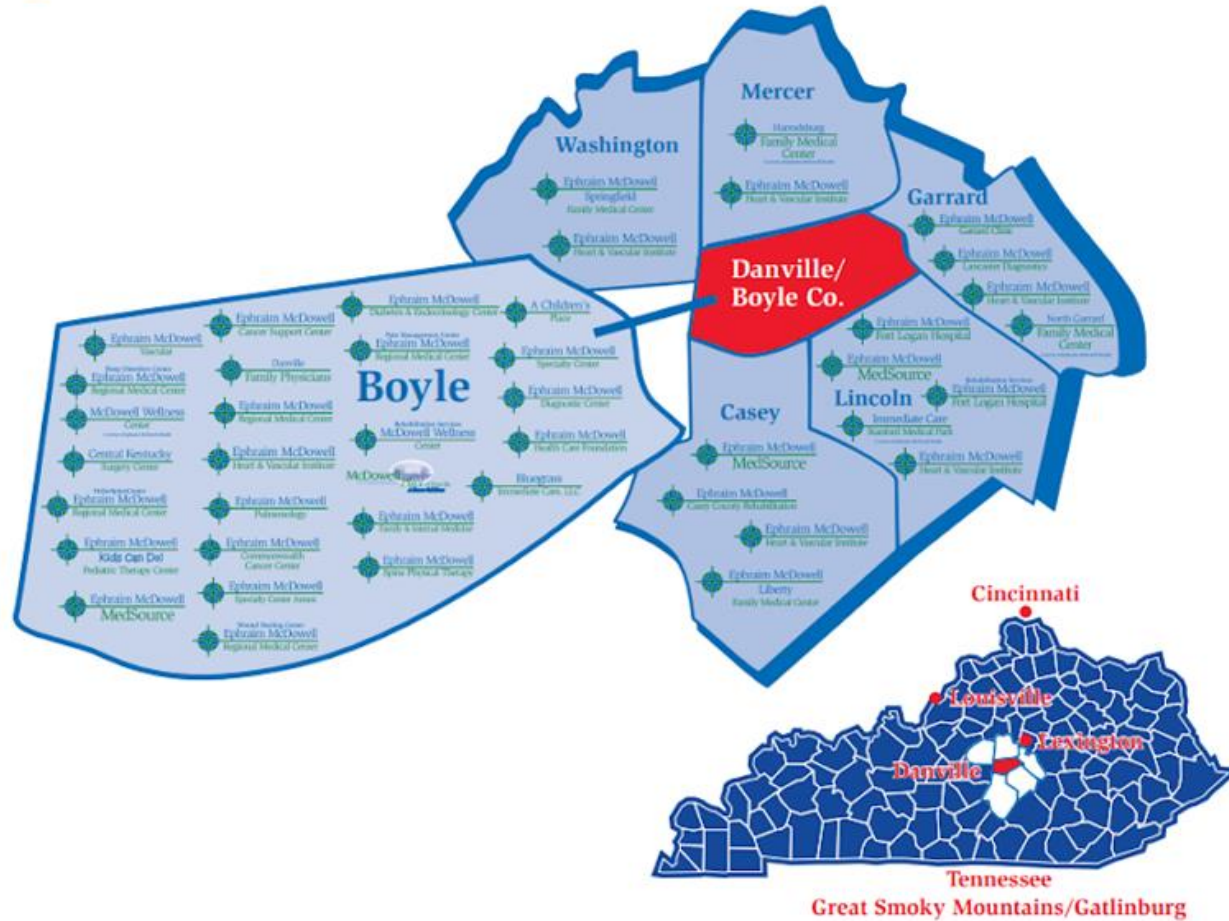
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Ephraim McDowell Health

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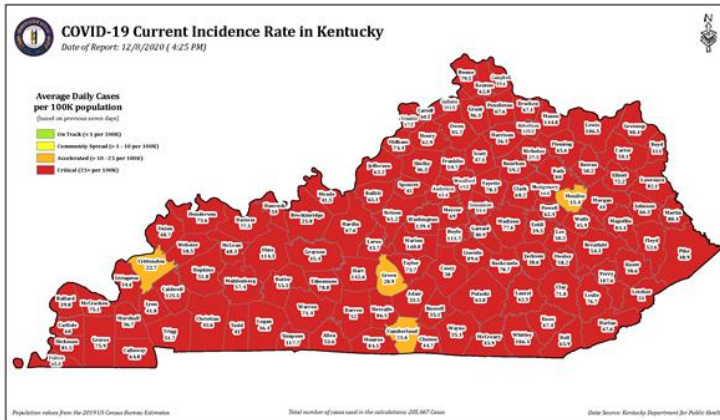
- 222 bed community hospital- Ephraim McDowell Regional Medical Center, Danville KY
- Two 25 bed critical access hospitals- Fort Logan Hospital, Stanford KY and James B. Haggin Hospital, Harrodsburg KY
- 30 rural health clinics and specialty clinics in a 6 county area of South Central KY serving 119,000 residents

Ephraim McDowell Health Service Area



05/14

COVID 19 stats



KY 43754 Total cases

Red Zones 25+ per 100 K

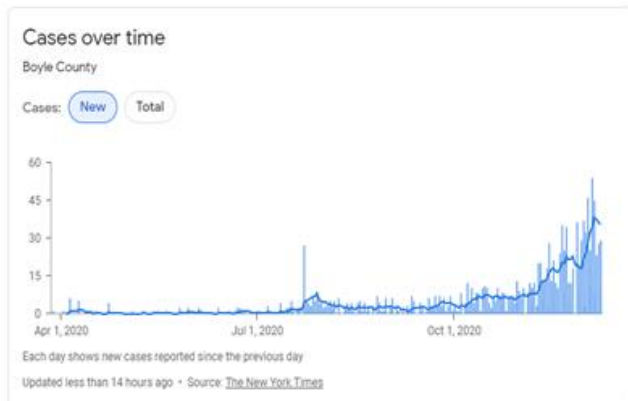
EMH service area 6 counties

-are ALL red zones.

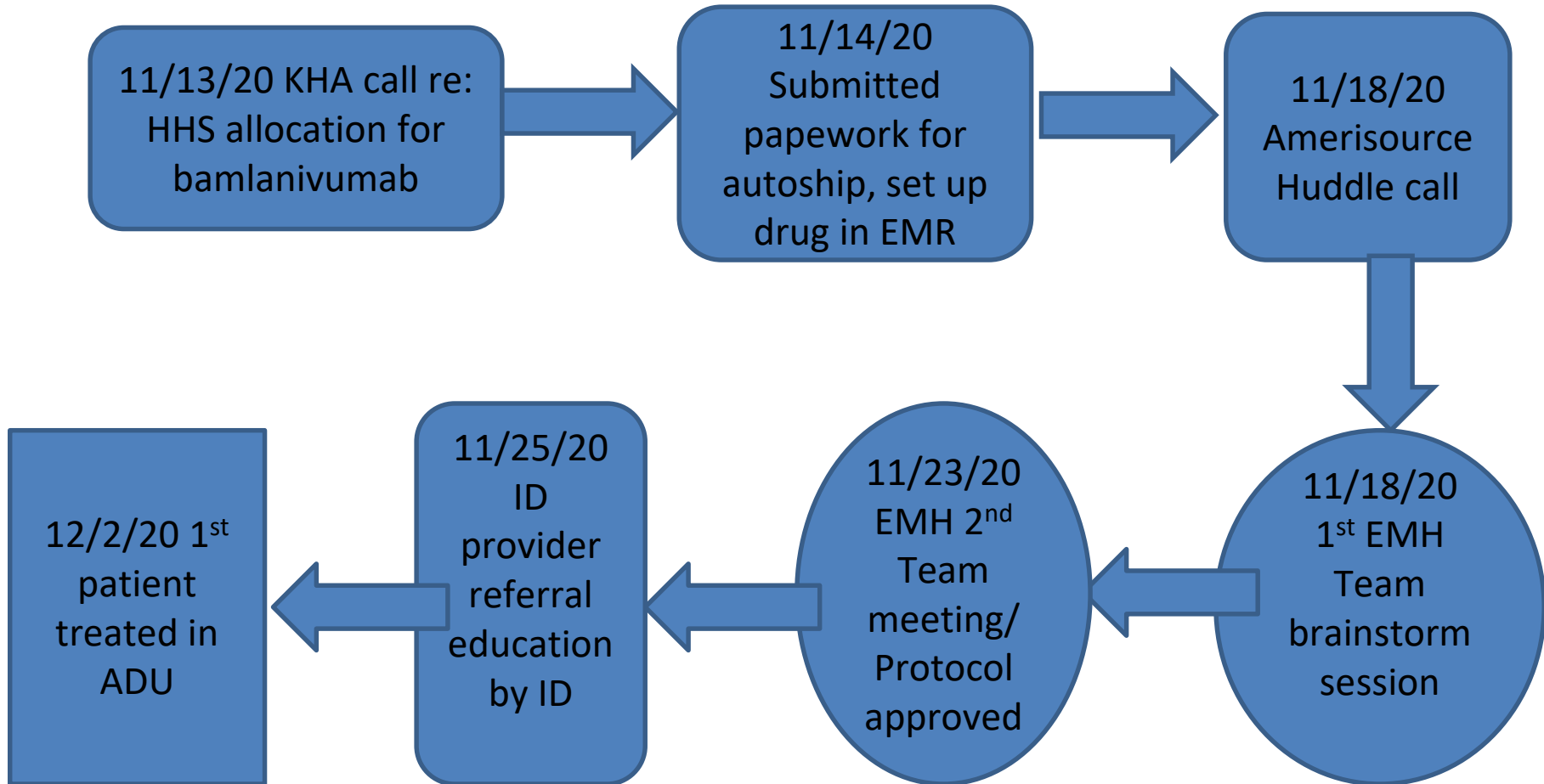
- 5228 total cases

-56 deaths

- avg 150 new cases/day



Timeline



Our journey

Multidisciplinary Team formed to address:

- Drug procurement
- Order set and referral process
- Space and staffing
- Drug distribution, storage and administration
- Emergency medications
- Equipment (infusion chairs, IV pumps)
- Registration /Consent/ Armband
- Patient entry and rooming process
- Medical Record documentation
- Patient education on therapy and follow up
- Charges

EMRMC ORDER SET

Clinic provider consults ID physician and documents date/time

Physician Orders

Generic substitutions may occur on medications dispensed - unless order specifies "Do Not Substitute."

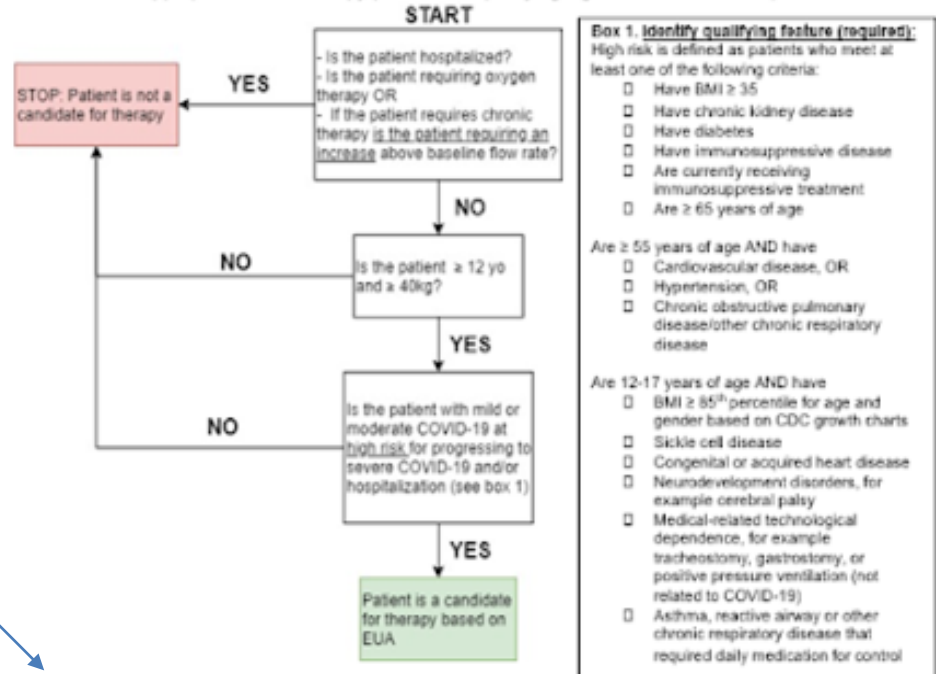
Height: _____ Weight: _____

Allergies: _____

Bamlanivimab for use in mild-moderate COVID-19

Administration through Emergency Use Authorization (EUA)
OUTPATIENT INFUSION ONLY

1. Date of positive SARS-CoV-2 test _____ (required)
Date of symptom onset: _____ (must be administered within 10 days of symptom onset)
2. Assess appropriateness of therapy (must select qualifying high risk feature in box 1)



Provider has consulted Dr. Christopher Petrey, DO, Infectious Disease for approval based on patient's risk factors. Date/Time: _____

3. Prescription Order: ***OUTPATIENT INFUSION ONLY***

Medication	Dose	Administration	Other
Bamlanivimab	700 mg	IV infusion over 60 minutes	Patient must be observed for 1 hour after infusion is complete
0.9% Sodium Cl Flush	30ml	3 x 10 mL flush post infusion	Flush the line after infusion
Diphenhydramine	50 mg	IVP STAT PRN hypersensitivity	Hypersensitivity Kit
Famotidine	20 mg	IVP STAT PRN hypersensitivity	
Hydrocortisone	100 mg	IVP STAT PRN hypersensitivity	

Physician Signature: _____

Order Date & Time: _____

If outside physician, please list:

Phone number: _____

Address: _____



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Patient Flow Plan

EMH CLINIC

- Positive Covid 19 test patient meeting criteria in clinic
- Clinic provider consult with ID provider
 - Clinic provider completes bamlanivimab order set and documents ID approval date and time
- H&P and order faxed to Recovery 3 unit
- Any EMH ED Covid 19 positive patients referred by ED provider to Recovery 3 (same process)

EMRMC Rec 3

- Rec 3 scheduler contacts patient to schedule infusion
- Instructs patient on how to report for appointment
- Pre registers patient account
- Provides daily schedule/orders to EMRMC Central Pharmacy by 2pm day prior
- Provides patient order, H&P, charge sheet in folder for ADU provider

Patient Flow Plan

EMRMC

ADU

- Patient calls ADU phone upon arrival
- ADU provider allows entry/ rooms patient
- Provider notifies Registration patient arrival
- Registration delivers armband , consent & charge sheet to zipwall
- Provider educates on risk/benefits/SE – consent
- Paperwork returned to Reg and scanned into EMR

Patient Entry from ED parking lot to designated ADU isolation room



Patient Flow Plan

EMRMC

ADU

- ADU provider starts IV lock
- ADU provider administers bamlanivimab infusion over 1 hour
- ADU provider flushes line with 30ml NS to assure complete dose administration
- ADU provider observes patient for 1 hour post infusion
- ADU provider administers emergency medications if symptoms of hypersensitivity
- ADU provider removes IV access
- Patient receives discharge instructions from ADU provider
- ADU provider documents infusion and inputs administration charges into EMR

Room set up



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Patient Flow Plan

DISCHARGE

HOME

- Patient remains under quarantine
- Follow up with primary care or ID physician if referred by ED

Pharmacy

- Procures drug from wholesaler/allocation
- Prepares AM and PM scheduled doses of bamlanivimab and delivers to ADU zipline 30 min prior to 1st patient each block
- If a dose is not administered, drug is returned to pharmacy for reassignment to next patient block.
- Hypersensitivity kits stocked in ED ADU
- 3 x 10 ml NS flushes dispensed with each dose

Necessity drives innovation

Challenge

- Space for Covid 19 + care
- # patients we could serve
- Avoid C19+ patients in common REG/ED wait area
- Direct patient to entry
- Staffing for infusion service
- Demand/referrals/prioritization of patients
- Allocation/limited supply

Action

- ADU -ED separate entrance
- Block schedule/3 infusion chairs
- Report to side door/direct to ADU treatment room
- Dedicated phone/signage
- Redeploy 1 FTE clinic provider
- ID weekly call to clinic providers/Consult process
- ID prioritization/ED using same referral process

Service Summary

- Two weeks to plan and implement new Service model for outpatient infusion of bamlanivumab to Covid positive outpatients
- 12/2/20 ADU service 1st patient with new Service process
- To date we have administered to 10 of 11 patients scheduled.
- No infusion reactions reported.

Questions?

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