Treating Monkeypox Patients in NYC: NYP/Columbia Protocols

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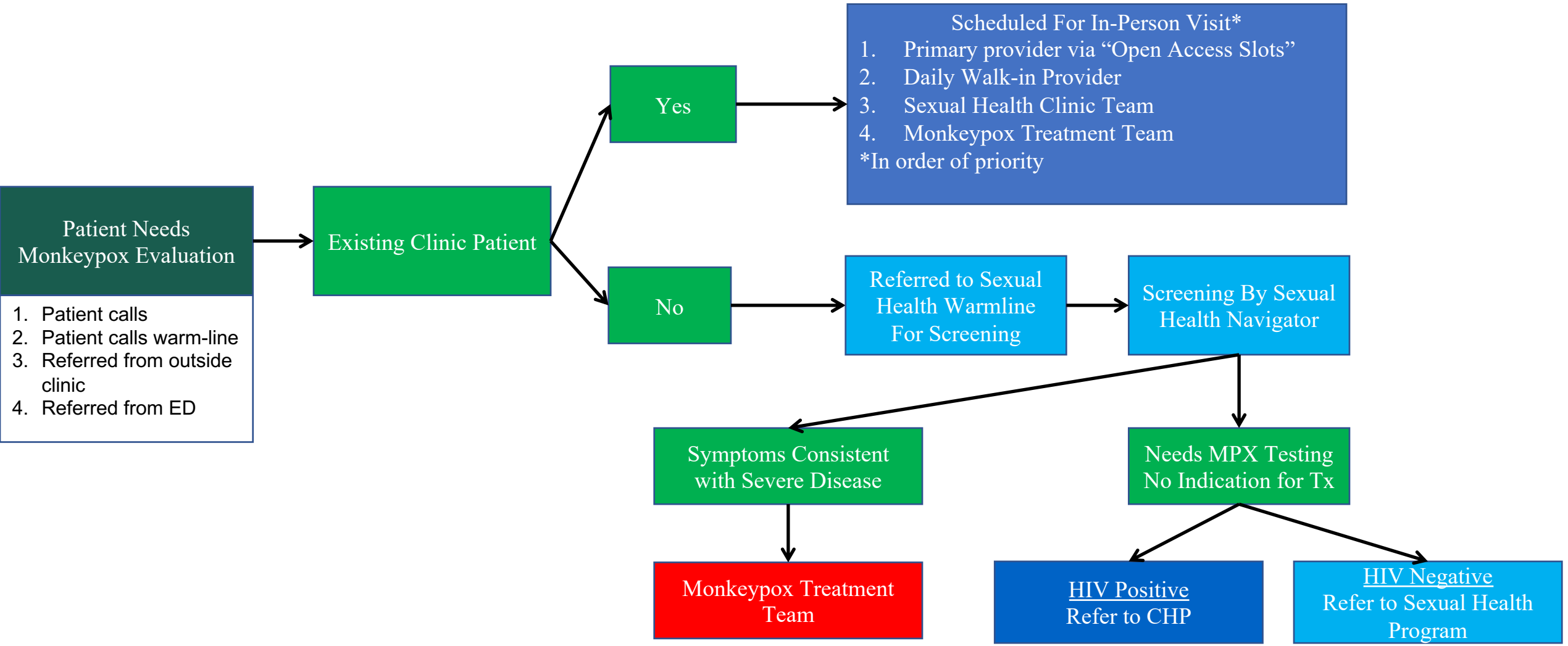
Notes:

1. I put this together based on frequent requests from other sites
2. This is not universal but based on our institutional set-up and resources
3. This was iterated on over 6 weeks, this is not where we started
4. I added some comments in the notes
5. Please reach out with questions

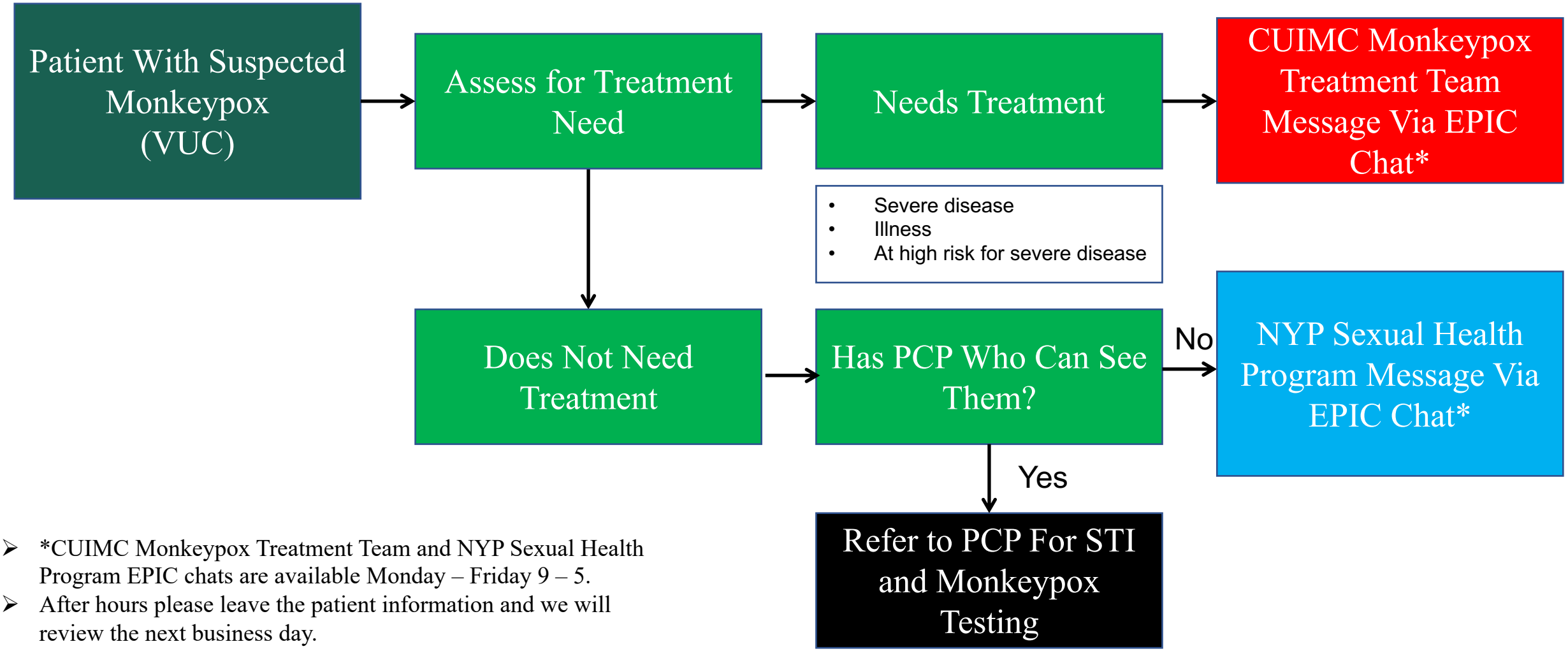
Evaluation and Testing

- Monkeypox testing integrated into workflows at individual sites
  - Used institutional website to disseminate testing instructions (that changed frequently)
  - Screening for symptoms at triage
    - If symptoms immediately placed in an isolation room and seen by provider before vitals, labs, etc
    - All supplies kept on site to ease effort on provider
  - Providers or same-day walk-in provider expected to screen their own patients whenever possible

Evaluation and Testing



Virtual Urgent Care Referral Pathway



- *CUIMC Monkeypox Treatment Team and NYP Sexual Health Program EPIC chats are available Monday – Friday 9 – 5.
- After hours please leave the patient information and we will review the next business day.

Emergency Department Referral Pathway

Patient Presents With Suspected Monkeypox

→ History and Exam

- Complete STI Testing
  - HIV
  - HCV
  - 3 Site GC/CT
  - RPR
  - HSV PCR (if ulcerative)
  - Monkeypox

→ Assess Need For MPX Treatment

Needs Treatment → CUIMC Monkeypox Treatment Team Message Via EPIC Chat*

Treatment Indications
- Severe disease
- Illness
- At high risk for severe disease

Does Not Need Treatment → Call Patient With Results

Monkeypox or any STI Testing Positive → PCP Referral OR NYP Sexual Health Program Message Via EPIC Chat*

- *CUIMC Monkeypox Treatment Team and NYP Sexual Health Program EPIC chats are available Monday – Friday 9 – 5.
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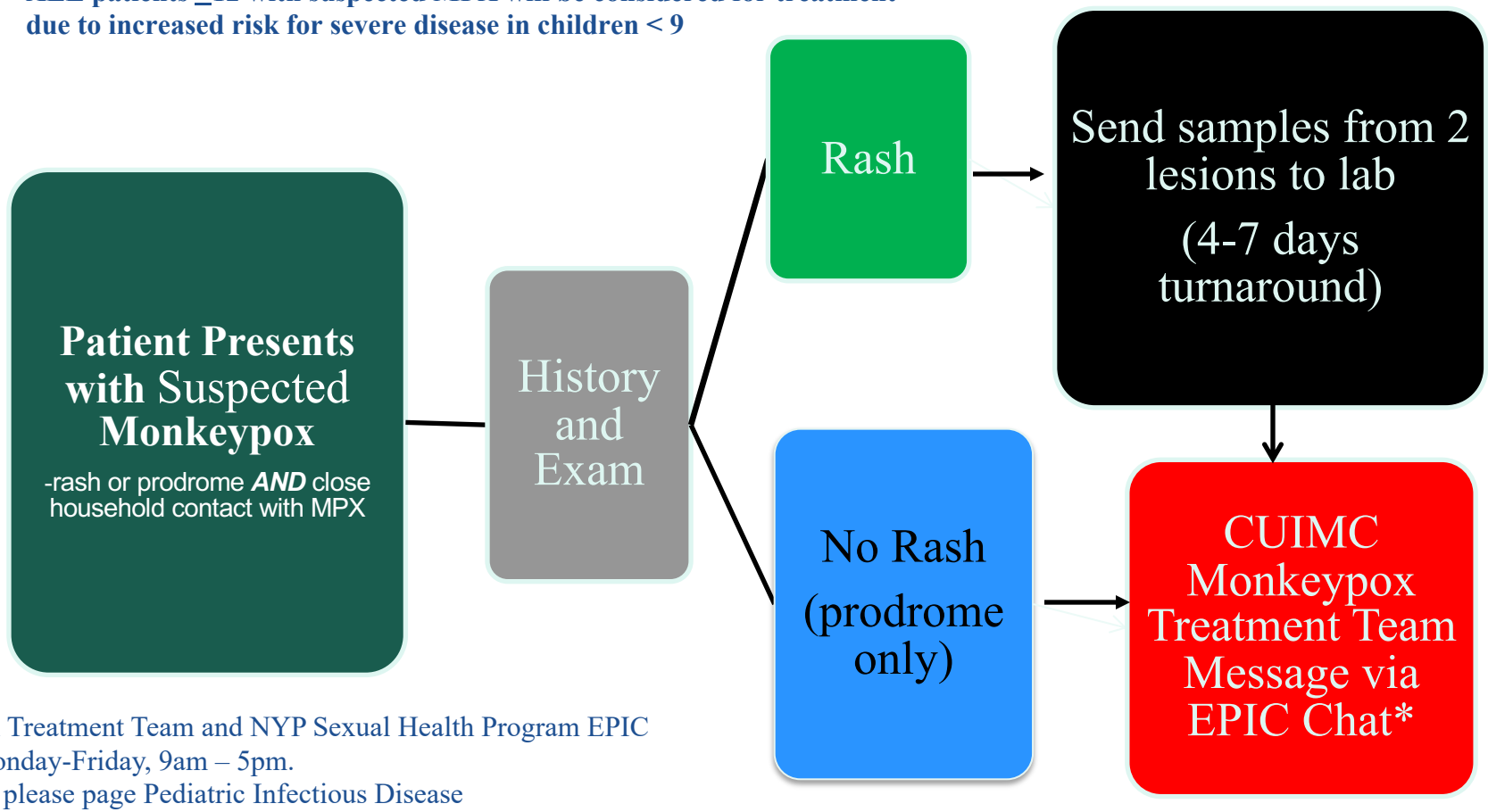
Pediatric ED Referral Pathway ≤ 12

ALL patients ≤12 with suspected MPX will be considered for treatment due to increased risk for severe disease in children < 9



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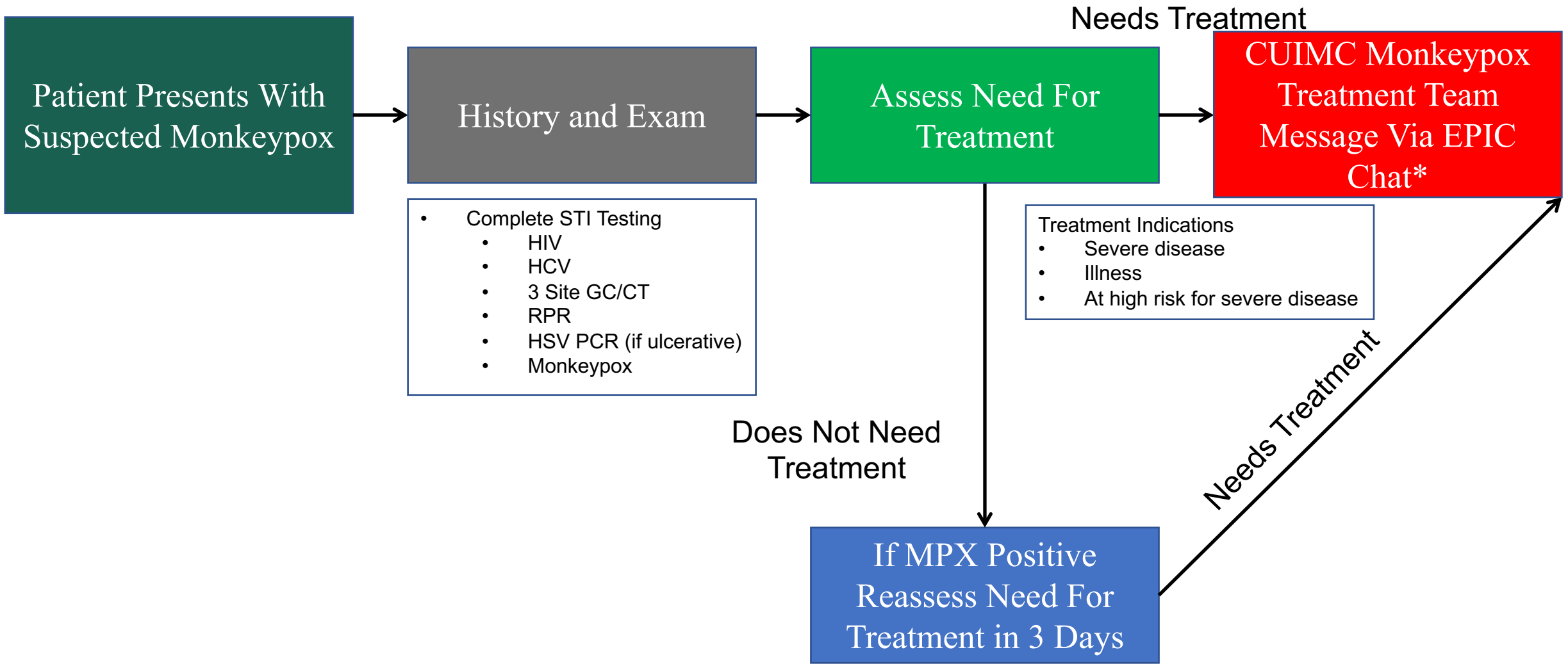
- After hours please page Pediatric Infectious Disease

Ambulatory Clinic Referral Pathway



Supportive Care Recommendations

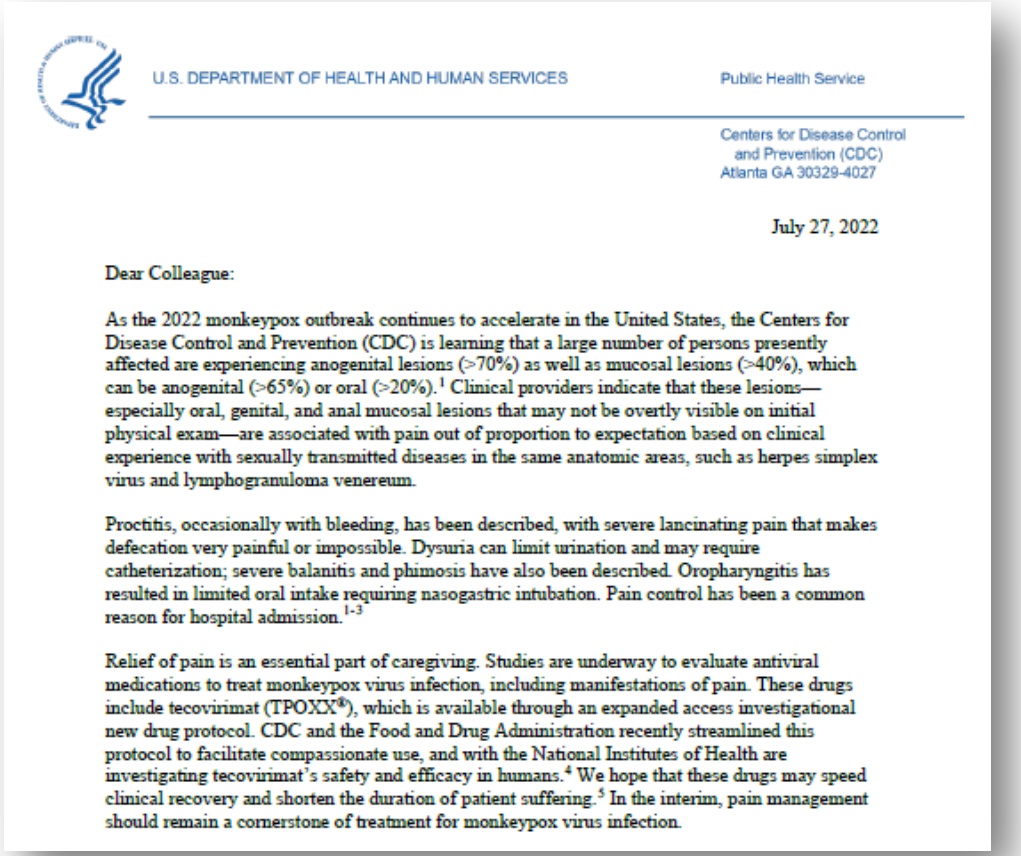
- **Proctitis**
  - Stool softeners
  - Lidocaine gel
  - Anti-inflammatory meds (if not bleeding)
  - Sitz Baths
  - Avoid opioids if possible

- **Genital Lesions**
  - Frequent bathing
  - Keep it dry
    - Change clothes frequently

- **Oropharyngeal lesions**
  - Magic mouthwash
  - Anti-inflammatory medications

Supportive Care Recommendations

For More Information



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES — Public Health Service

Centers for Disease Control and Prevention (CDC)
Atlanta GA 30329-4027

July 27, 2022

Dear Colleague:

As the 2022 monkeypox outbreak continues to accelerate in the United States, the Centers for Disease Control and Prevention (CDC) is learning that a large number of persons presently affected are experiencing anogenital lesions (>70%) as well as mucosal lesions (>40%), which can be anogenital (>65%) or oral (>20%).[1] Clinical providers indicate that these lesions—especially oral, genital, and anal mucosal lesions that may not be overtly visible on initial physical exam—are associated with pain out of proportion to expectation based on clinical experience with sexually transmitted diseases in the same anatomic areas, such as herpes simplex virus and lymphogranuloma venereum.

Proctitis, occasionally with bleeding, has been described, with severe lancinating pain that makes defecation very painful or impossible. Dysuria can limit urination and may require catheterization; severe balanitis and phimosis have also been described. Oropharyngitis has resulted in limited oral intake requiring nasogastric intubation. Pain control has been a common reason for hospital admission.[1-3]

Relief of pain is an essential part of caregiving. Studies are underway to evaluate antiviral medications to treat monkeypox virus infection, including manifestations of pain. These drugs include tecovirimat (TPOXX®), which is available through an expanded access investigational new drug protocol. CDC and the Food and Drug Administration recently streamlined this protocol to facilitate compassionate use, and with the National Institutes of Health are investigating tecovirimat's safety and efficacy in humans.[4] We hope that these drugs may speed clinical recovery and shorten the duration of patient suffering.[5] In the interim, pain management should remain a cornerstone of treatment for monkeypox virus infection.

CDC recommends the following:

- Assess pain in all patients with monkeypox virus infection.
- Recognize that substantial pain may exist from mucosal lesions not evident on physical exam; validation of the pain experience can build trust in the care provider and care plan.
- Use topical and systemic strategies to manage pain. These can include sitz baths and salt-water gargles, topical steroids and lidocaine, over-the-counter pain relievers (e.g., non-steroidal anti-inflammatory drugs, acetaminophen), and ultimately prescription pain relievers (e.g., gabapentin, opioids) as indicated by need for pain control.
- Seek consultation with pain specialists for refractory cases.
- Use stool softeners for proctitis, especially if opioid analgesia is prescribed.
- Stay in contact with patients to regularly assess their pain control and adjust pain management as indicated.
- Monkeypox treatment[6] may be indicated for pain control.

Treatment Program Team (Resource Intensive)

Resource	Role
Providers	Seeing patients and completing EPIC templated notes Started with one provider and have expanded to the entire ID division
Program Coordination	Managing staff, assisting providers, completing and uploading CDC paperwork
Nurse	Assist with sample collection (both local labs and if sending to CDC)
Research lab support	Process labs and complete specific CRFs If sending samples to the CDC
Research pharmacy	Pharmacy to manage and dispense IND medication
Scheduling	Assist with scheduling initial and follow-up visits
Regulatory	Assistance implementing the IND in your regulatory enviroment

The Importance of Interdisciplinary Care

Resource	Role
Dermatology	Addressing concerns about scarring (particularly facial)
GI	Someone who can do either sigmoidoscopy or anoscopy for persistent pain despite treatment
GI/Colorectal surgery	Addressing peri-rectal abscesses and/or fissures
Wound Care	To assist with complicated or deep wounds and improve healing
Urology	Addressing the impact of deep penile lesions on sexual function and appearance
Ophthalmology	Addressing conjunctivitis and corneal disease
Otolaryngology	Addressing throat (with possible abscesses) and ear infections
Mental Health	Addressing depression associated to the stigma of disease and long-term (up to 28 days) isolation

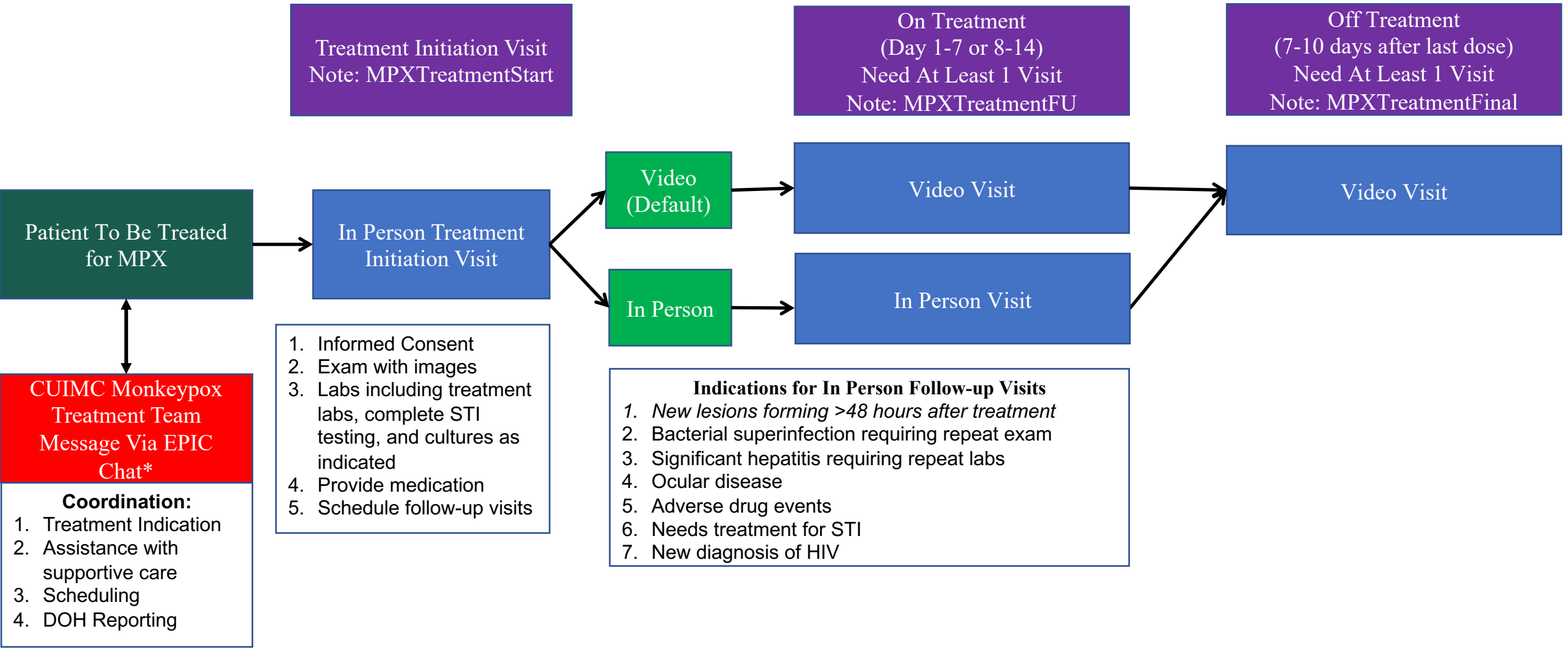
Current Indications for Treatment - Severe Disease

- **Severe disease**
  - Sepsis
  - Hospitalization
  - Evidence of viremia
  - Lesion location/type (e.g areas at risk of scarring or stricture)
    - Eye
    - Mouth/Pharynx
    - Rectum
    - Urethra
    - Vagina

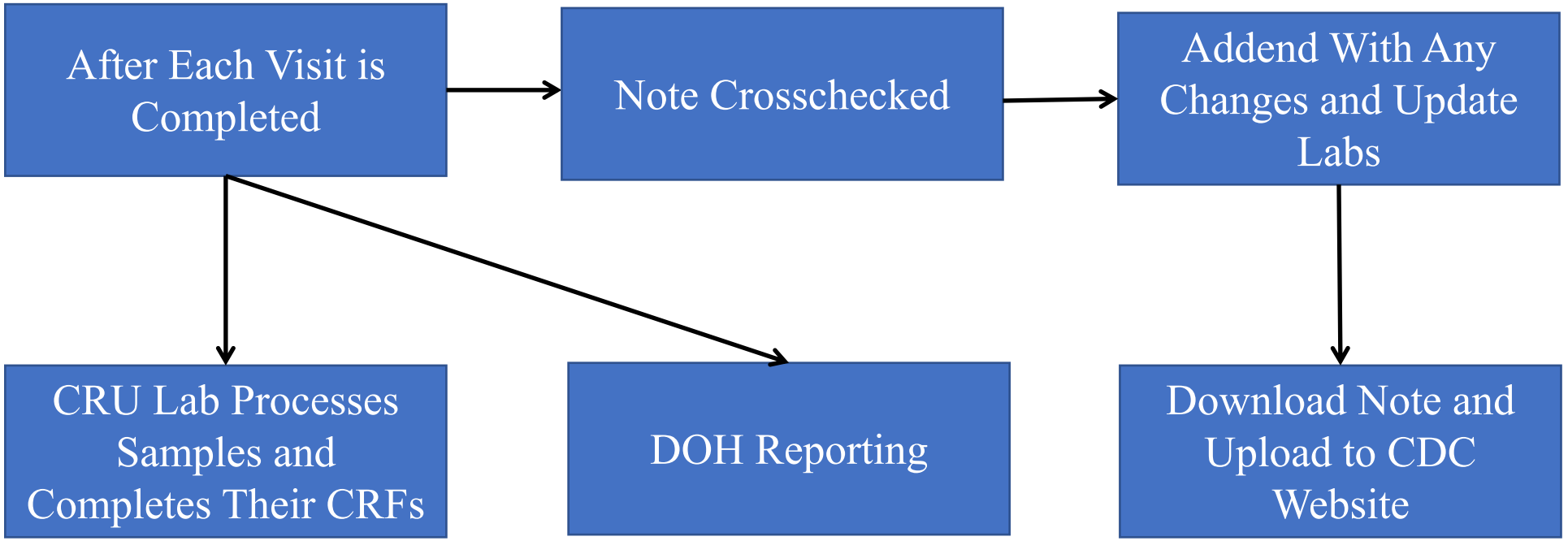
- **Illness complication**
  - Secondary bacterial infection
  - Proctitis with tenesmus
  - Uncontrolled pain
  - Rectal bleeding
  - Gastroenteritis
  - Pneumonia
  - Encephalitis

- **At high risk for severe disease**
  - HIV with high VL or low CD4
  - Severe immunocompromise
  - Age < 8
  - Pregnant/breastfeeding
  - Significant active exfoliative dermatologic conditions
  - Increased risk for stricture/fisulta (e.g IBD)

Outpatient Treatment Pathway



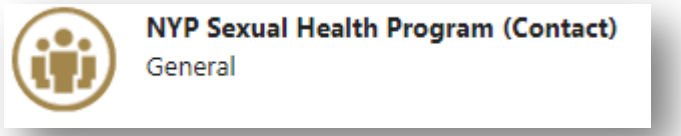
Additional Management By Treatment Team Management



We Have Lots of Resources for Patient Contact

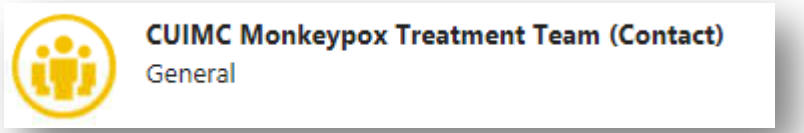
Existing Resources

- Existing CHP patients
  - Open access line triaged by nursing
- Existing or new sexual health patients
  - Warm line triaged by sexual health navigators
  - Internal referrals can go through a new EPIC chat



New Resource

- Dedicated EPIC chart for MPX treatment evaluations and support



- For all other scenarios page Infectious Diseases or Pediatric Infectious Diseases as appropriate

Key Points From Our Experience

- It takes a team to treat patients with Monkeypox
  - Have sub-specialty assistance arranged in advance
- Offer supportive care while waiting for or before needing treatment
- An initial in person visit is beneficial:
  - Get complete STI testing as STI co-infection is common
    - HIV, GC, CT, RPR, HSV, Hep C
  - Bacterial superinfection is common and bacterial cultures are helpful to direct therapy
    - MRSA, MSSA, GAS, Klebsiella, Enterococcus
  - Pictures are helpful for monitoring progress
- **This disease can be severe and patients are grateful for our support**

Contributors

Monkeypox Treatment Team

- Magda Sobieszczyk
- Jason Zucker
- Brett Gray
- Arianna Pazmino
- Mascha Elskamp
- Orlando Rosario
- Jacob McClean
- Clare Delaurentis
- Michelle Chang
- Lawrence Purpura
- Jon Kirschner

HP6/VC4

- Matt Scherer
- Peter Gordon
- Susan Olender
- Caroline Carnevale
- Maria Espinal

IP&C

- Yoko Furuya
- Tina Wang

Providers

- All of our providers who have seen and treated MPX patients and provided feedback (more then I can list here!)