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## Basic At-Home Exercises for Common Areas of Pain

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# Basic At-Home Exercises for Common Areas of Pain

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# Problem Identification and Description of Need

- **Problem:** Physical therapy (PT) is commonly the first-line management for MSK pain in the office
  - For various reasons including scheduling, transportation, convenience, cost etc... patients may have delayed treatment and thus prolonged duration of pain
  - The COVID-19 pandemic has exacerbated barriers to accessing the primary care office and/or PT
- **Description of Need:**
  - The internet is saturated with exercises and finding the right ones may be challenging for patients
    - Access to this information can be limited by resource, knowledge, or convenience especially to at-risk populations (i.e. the elderly, laborers) who are most prone to MSK pain
  - Providing patients with a one-stop pamphlet summarizing simple exercises for various body pains simplifies the process and may encourage at-home exercise that can:
    - Accelerate the rehabilitation process
    - Prophylactically prevent MSK pain

# Public Health Cost

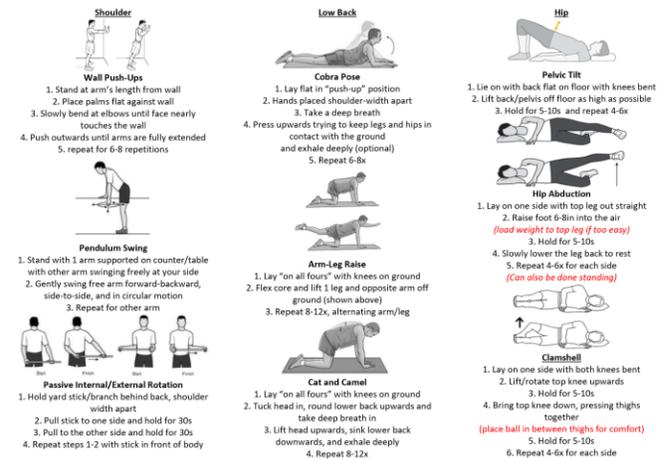
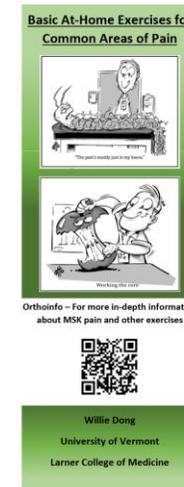
- MSK conditions are a leading cause of disability affecting >50% of US population. ~85% of these patients have at least 1 visit with a provider and average ~6 visits per year<sup>1</sup>
- A recent study done in an urban setting in the US found a nearly 50% reduction in volume during March-May 2020 of the COVID-19 pandemic. Telehealth visits increased from <1% to >85% at this time with 100% of physical therapists having used telehealth. Patients seen were primarily young, English-speaking, and non-Hispanic White<sup>2</sup>
- Patients referred to physical therapy may have to wait several weeks before an appointment especially for those without private insurance and during the COVID-19 pandemic

# Community Perspectives

- An interview was done with local Family Medicine Physician and Physical Therapist
- Time between PCP referral and PT appointment for non-acute complaints takes an average of 2 weeks
  - During this time patients often do not begin the rehab process/exercises
  - Activities limited to temporary pain measures recommended by PCP including medication, heat pads, etc...
- **Barriers to PT:**
  - Cost – patients delay PT due to out-of-pocket costs when deductibles have not been met
  - Scheduling – Evening appointments tend to be most popular either due to work or family members providing transportation work
    - Not an immediate fix – patients typically require several appointments
  - Interestingly, many patients agreeing to PT referral in PCP office do not follow up
    - “Patients think PT is helpful in the doctor’s office but change their minds when they go home”
- Both believe simple at-home exercises, especially during the latent period, may help speed up recovery
  - Caution for more acute diagnoses and warn against exercises that cause pain

# Intervention and Methodology

- A single page pamphlet (front/back) was created consisting of 3 exercises for neck, shoulder, low back, hip, and knee pain
- Each workout was selected for simplicity and capacity to be done without equipment
- Workouts contain instructions and descriptions of modifications as applicable



# Results and Response

- The pamphlet can be a one-stop-shop provided to patients presenting for various MSK concerns or patients without MSK pain as prophylactic exercises
- Quantitative assessments determining effectiveness of the pamphlet may be assessed in ways:
  - Patients without MSK concerns can be randomized into two groups: 1 group provided the pamphlet and 1 group without
    - A prospective study could be done to look at frequency of office visits for MSK concerns for each group
  - Patients coming in for MSK concerns can be given the pamphlet and assessed prospectively for repeat visits, duration of rehabilitation, and self-reported quality of life

# Evaluation of Effectiveness and Limitations

- To determine effectiveness of the pamphlet, patients would need to be monitored longitudinally for months-years
  - This information could be compared to data prior to distribution or with randomized trials as previously discussed
  - Thorough evaluation of this intervention could not be performed as it was limited by the short time span for implementation

# Recommendations

- Assess effectiveness via multiple parameters in a quantitative/qualitative longitudinal study as previously described
- Survey patients on barriers to accessing physical therapy at local/regional primary care centers
- Survey patients on satisfaction of at home self-directed exercises for MSK pain from the pamphlet or other resources
- Resources may not be the limiting factor for patient adherence to PT, rather methods to increase motivation may be beneficial

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Consented: X

Name: Eurica Chang, MD

Name: Debra Meed, DPT

Did NOT Consent\_\_\_\_\_

Name:

Name:



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