

MARKET NEED

PRESENTEEISM ¹⁻²

Decreased productivity in employees whose have health issues that do not cause them to miss work, but interfere with their job performance at work.

The greatest cause of reduced work performance is pain - not missing time at work

People in all types of jobs experience presenteeism - no difference for age, sex, location, or type of job

The most common reasons for avoiding medical care include: time, getting off work, transportation, long wait times at the doctor's office, and childcare

EPIDEMIOLOGY ³⁻⁵

Musculoskeletal pain-caused presenteeism is estimated to lead to an average of 17 hours per month of productivity loss, more than productivity loss due to employees missing for sick leave

Neck pain is more likely in office workers, especially those who work >6 hours per day, but the vast majority remain at work instead of taking time off. 34-59% of office workers have neck pain each year

At any point in time, 1/3 of all US adults have joint pain, swelling, or limited motion and about 2/3 of US adults will experience back pain at some point. Costs related to back pain are rising at a faster rate than overall healthcare costs as well.

COST OF PRESENTEEISM ⁶⁻⁸

Pain-related productive time decreases leads to an estimated loss of **\$61.2 billion per year**, which is about 27% of the total estimated cost of pain conditions.

- Of the costs associated with different healthcare conditions, a large percentage is associated with presenteeism. Some estimates include 56% of all osteoarthritis, 60% of all back and neck pain, and 33% of chronic pain costs
- Pain in general is linked to an estimated \$802 per year per employee, while back pain specifically is \$329 per year per employee and arthritis is \$183 per year per person.
- Productivity loss from health conditions ranges from \$15 per employee per year compared to healthy employees to over \$1600 per year more. For a company with 10,000 employees, this productivity loss can be greater than \$3.8 million per year, not including medical costs

References

1. Cancelliere C, Donovan J, Stochkendahl MJ, et al. Factors affecting return to work after injury or illness: best evidence synthesis of systematic reviews. *Chiropr Man Therap*. 2016;24(1):32. Published 2016 Sep 8. doi:10.1186/s12998-016-0113-z
2. Stewart WF, Ricci JA, Chee E, Morganstein D, Lipton R. Lost productive time and cost due to common pain conditions in the US workforce. *JAMA*. 2003;290(18):2443-2454. doi:10.1001/jama.290.18.2443
3. Taber JM, Leyva B, Persoskie A. Why do people avoid medical care? A qualitative study using national data. *J Gen Intern Med*. 2015;30(3):290-297. doi:10.1007/s11606-014-3089-1
4. Chen X, O'Leary S, Johnston V. Modifiable individual and work-related factors associated with neck pain in 740 office workers: a cross-sectional study. *Braz J Phys Ther*. 2018;22(4):318-327. doi:10.1016/j.bjpt.2018.03.003
5. Schultz AB, Edington DW. Employee health and presenteeism: a systematic review. *J Occup Rehabil*. 2007;17(3):547-579. doi:10.1007/s10926-007-9096-x
6. Schultz AB, Chen CY, Edington DW. The cost and impact of health conditions on presenteeism to employers: a review of the literature. *Pharmacoeconomics*. 2009;27(5):365-378. doi:10.2165/00019053-200927050-00002
7. Mitchell RJ, Bates P. Measuring health-related productivity loss. *Popul Health Manag*. 2011;14(2):93-98. doi:10.1089/pop.2010.0014
8. Lord DJ, Wright JR, Fung R, et al. Integrated Physical Medicine at Employer-Sponsored Health Clinics Improves Quality of Care at Reduced Cost. *J Occup Environ Med*. 2019;61(5):382-390. doi:10.1097/JOM.0000000000001536

BENEFITS OF MOBILE CLINICS

INTERVENTION INTO PRESENTEEISM ¹



Biggest issues for workplace health interventions:

1. Maintaining high participation rates
2. Maintaining impact over time

Solutions to these issues:

1. Bring the intervention directly to employees, leading to less barriers to treatment
2. Focus on pain reduction and strategies to improve work tolerance
3. Support from employers can improve participation, reduce symptoms, and reduce presenteeism

MOBILE PT MODEL: ²⁻⁹



Intervene earlier by providing on-site care

Mobile health clinics save on average \$1,600 per visit due to prevention of future health care treatment needs
The longer a patient is away from work, the more difficult the return to work is. The earlier the care is initiated, the less likely they are to miss work



Save money compared to a traditional clinic

For the average mobile health clinic, labor costs is about 90% of the overall expenses, compared to the cost of rent in other models
In a mobile clinic, the costs for the payer is typically much less than typical clinics, with estimates of \$243 on average in a mobile clinic to \$1,879 - \$2,661 in a traditional clinic



Increase health and productivity

Interventions to reduce pain, which physical therapists have knowledge and expertise in, can improve workplace productivity
Return on investment for previous workplace interventions was positive within one year and saved an average of 246% in presenteeism benefits, translating to a median of \$158 per participant
Average return on investment for a health clinic is \$12 to \$36 saved for every \$1 spent



Benefits employers

Allowing pain to go untreated can turn presenteeism to absenteeism, resulting in missed time from work. Musculoskeletal pain is the 2nd leading cause of short-term or temporary disability, contributing to approximately 290 million workdays missed each year
Integrating healthcare into employment settings has been shown to reduce overall health costs, amount of treatment visits needed, time missed from work, and presenteeism
Employer-integrated healthcare for musculoskeletal issues saves employers an average of \$272 to \$630 per patient episode
Improving employee moral and fostering feelings of respect and care from employers to employees reduced presenteeism and improves productivity



Barriers to consider

Parking can be difficult to find, especially in urban areas, and must be arranged ahead of time
Finding reliable internet access and power can be an issue, as most mobile clinics run on generators that are more prone to a loss of power than traditional buildings
Clinic space is limited and generators cause increased noise in this space, which impacts the types of treatments that can be performed and ability to hold confidential patient-provider conversations

References

1. Cancelliere C, Donovan J, Stockkendahl MJ, et al. Factors affecting return to work after injury or illness: best evidence synthesis of systematic reviews. *Chiropr Man Therap*. 2016;24(1):32. Published 2016 Sep 8. doi:10.1186/s12998-016-0113-z
2. [Mobile Health Map. Impact Report. Harvard Medical School. https://www.mobilehealthmap.org/impact-report](https://www.mobilehealthmap.org/impact-report)
3. Hutting N, Boucaut R, Gross DP, et al. Work-Focused Health Care: The Role of Physical Therapists. *Phys Ther*. 2020;100(12):2231-2236. doi:10.1093/ptj/pzaa166
4. Attipoe-Dorcoo S, Delgado R, Lai D, Gupta A, Linder S. Analysis of Annual Costs of Mobile Clinics in the Southern United States. *J Prim Care Community Health*. 2020;11:2150132720980623. doi:10.1177/2150132720980623
5. van Dongen JM, Proper KI, van Wier MF, et al. Systematic review on the financial return of worksite health promotion programmes aimed at improving nutrition and/or increasing physical activity. *Obes Rev*. 2011;12(12):1031-1049. doi:10.1111/j.1467-789X.2011.00925.x
6. Schultz AB, Chen CY, Edington DW. The cost and impact of health conditions on presenteeism to employers: a review of the literature. *Pharmacoeconomics*. 2009;27(5):365-378. doi:10.2165/00019053-200927050-00002
7. Yu SWY, Hill C, Ricks ML, Bennet J, Oriol NE. The scope and impact of mobile health clinics in the United States: a literature review. *Int J Equity Health*. 2017;16(1):178. Published 2017 Oct 5. doi:10.1186/s12939-017-0671-2
9. Lord DJ, Wright JR, Fung R, et al. Integrated Physical Medicine at Employer-Sponsored Health Clinics Improves Quality of Care at Reduced Cost. *J Occup Environ Med*. 2019;61(5):382-390. doi:10.1097/JOM.0000000000001536

USER PROFILE



DEMOGRAPHIC

On-Site Mobile Physical Therapy has two target users. For simplicity, we will refer to the different user profiles as "Factory" and "Corporate" employees.

The factory employee is a 44 year old individual with a physically demanding job. This individual typically works in a factory setting where they are constantly on their feet, performing fast paced, repetitive movements that can lead to chronic overuse injuries. This individual may have received their high school education but does not typically have postsecondary education. The average income for this individual is between 24-38k per year.
<https://bit.ly/3cSBfCS>

The corporate employee is a 44 year old individual typically working in an office setting and is required to sit for many hours of the day. This person is susceptible to chronic low back and neck pain from prolonged sitting. They may also experience wrist/hand injuries from repetitive computer or phone related tasks. This person is college educated and receives an annual salary of approximately 60k.
<https://www.careerbliss.com/rtp/salaries/>
<https://www.bls.gov/cps/cpsaat18b.htm>



PSYCHOGRAPHIC

While the daily responsibilities of these employees may differ, the way that their work influences their well being can be rather similar. Injuries can affect both employees and have negative consequences pertaining to job stability and economic hardship. These individuals are hardworking and efficient with their time, and appreciate a team-like environment where they support and encourage one another. In many cases, these individuals are willing to sacrifice their physical well being in order to support their families, or to retire financially sound at a later time. These employees feel the stress of productivity demands and yearn to be recognized for their efforts and rewarded with promotions. When an injury occurs, these individuals may be prescribed pain medications to allow them to continue to work through pain. This process has the potential to prolong their injury by not appropriately resting and rehabilitating, but can also have the potential to lead to addiction.



THE SOLUTION

A mobile physical therapy practice that is able to visit their job site 1-2x per week and provide physical therapy interventions to reduce their immediate pain and create a plan for a longer term solution.



FEATURES/BENEFITS

1. Short-term pain relief through pain modulating interventions.
2. Long-term pain relief through exercise prescription and/or referrals to traditional PT.
3. An hour of stress free environment where they can refresh for the remainder of their workday.
4. Communication with empathetic physical therapists who can help build an individualized plan for success.
5. Convenience of providing these service at their work, during work hours as opposed to neglecting their physical health altogether, or having to travel to PT outside of work hours, typically during rush hour.
6. The contracted business does not have to provide physical space or equipment upkeep of an in-house clinic.



UNMET NEED

In both instances, these employees experience pain from chronic repetitive or overuse injuries. This pain affects their ability to perform work related tasks and subsequently, their job stability.

COMPETITOR ANALYSIS

Physical Therapy



No mobile physical therapy clinics in the Triangle

Many traditional clinics throughout the Triangle and surrounding areas

Chiropractic



1 Mobile Chiropractic Clinic: Offers corporate/company visits for 60% off their usual rate, requires 10 or more people to book

Many traditional clinics throughout the Triangle and surrounding areas

Massage



1 Mobile Massage Company: Does not offer corporate packages

Limited medical intervention

Employer-Sponsored Healthcare



Nationally, 30% of employers with 5000+ employees have on-site healthcare clinics, but less than 50% have physical therapy

Local examples that offer integrated healthcare, including PT: Cisco and SAS

Mobile Health Clinics



45 total in NC, 6 in the Triangle:

In the Triangle: 2 dental clinics, 1 hospital-based healthcare, 2 medical screening, and 1 nursing primary care

Nationally: between 1,500 and 2,000 mobile health clinics

Resources

1. Lord DJ, Wright JR, Fung R, et al. Integrated Physical Medicine at Employer-Sponsored Health Clinics Improves Quality of Care at Reduced Cost. *J Occup Environ Med.* 2019;61(5):382-390. doi:10.1097/JOM.0000000000001536
2. Mobile Health Map. Find Clinics. Harvard Medical School. <https://www.mobilehealthmap.org/map>

REIMBURSEMENT MODELS

Per Encounter Fee (Employee)

This is a 100% cash-based model. This model benefits employers who wish to offer this service to their employees but they do not wish to take on the financial risks of this service. This is an introductory model to identify need/utilization of the services and to keep employees accountable for using services on an as needed basis. With this model, the employees can be provided a "superbill" (pictured right), that is an itemized receipt of services that can be submitted to their insurance companies for partial or full reimbursement.

Per Encounter Fee (Employer)

This is also a cash-based model. This model provides the employer with a discounted rate to provide services to their employees. Employers are charged based on utilization of services. This can be desirable for employers who are happy to offer these services to their employees, but are unsure if the services will be well received and utilized. Therefore, there are no annual commitments. Since this is free to the employee, the pitfall of this model is that employees may overutilize this service. This model also requires On-Site PT to negotiate a rate that considers travel and opportunity costs of submaximal utilization. Simply put, if employees do not utilize the service, On-Site is not compensated.

Base Rate (Employer) + Per Encounter Fee (Employee)

This model is a hybrid of the above mentioned models. This model consists of a negotiated base rate which the employer agrees to reimbursement On-Site PT per unit of service. However, because this model utilizes an employee copay, this inturn keeps the employee accountable for only using the services as needed. This is the most desirable model for a company who wants to offer our services to their employees, but they are unsure to what extent services will be utilized, and they do not want their employees abusing the privilege. This also reduces financial risk to the employer because there are no long-term commitments.

Capitation Payment (Employer)

This payment model describes a negotiated rate between the employer and On-Site PT where an annual fee is established to cover the entirety of employees within the company. The payment is dispersed over a designated amount of time (e.g. biweekly, monthly, quarterly). This model is desirable for companys who offer employee benefit packages and wish to incorporate On-Site PT services into their benefits program. Employers interested in this model have recognized a need to provide aid to their injured employees. This model tends to be the lowest cost per unit of service and can lead to high utilization. This will require On-Site PT to maintain the necessary resources (staffing and vehicles) to cover the needs of all employees at that location over the course of the year. Alternatively, On-Site PT will need to set expectations regarding how many patients can be seen in a given time frame. These benchmarks will need to be realistic and specified within the contract.

Insurance Coverage (Employee)

This is the standard payment model for physical therapy services and will allow On-Site PT to bill insurance companies for services provided to their members. This is an alternative to the cash-based model and will be utilized when employers allow On-Site PT to treat their employees, but do not wish to pay the services rendered to them. In addition, On-Site PT will need to determine that the cash-based model does not work at this particular location. In general, this payment model will be avoided because insurance companies require therapists to demonstrate "progress" toward recovery, therefore preventing On-Site PT from providing services that may be deemed "maintenance" or "wellness" treatments. In addition, On-Site PT will not be fully equipped for providing traditional PT services such as exercises that require substantial space or equipment or to perform.

SUPERBILL

Payment Receipt

INVOICE NUMBER DATE OF ISSUE
00001 07/24/2019

Patient:
Jane Doe
Street address
City, State Country
ZIP Code

Contact:
Raleigh, NC, 27613
1-800-ONSITE
staff@onsitePT.com
onsitePT.com

DESCRIPTION	Procedure	UNIT COST	QTY/HR RATE	AMOUNT
Manual Therapy	97140	\$20	2	\$40
Therapeutic Exercise	97110	\$20	1	\$20
Ice/Electrical Stimulation	97014	\$20	1	\$20
Additional Items		\$0	1	\$0

INVOICE TOTAL

\$80

SUBTOTAL \$80
DISCOUNT \$0
(TAX RATE) 0%
TAX \$0
TOTAL \$80

Chris Adamson PT, DPT, ATC, CSCS
Raleigh, NC, 27613
1-800-ONSITE
staff@onsitePT.com
onsitePT.com

Provider Signature:



TERMS

This patient has paid in full for the service provided and On-Site Physical Therapy is NOT an insurance provider for this claim. **PLEASE PROVIDE ANY PAYMENT DIRECTLY TO THE PATIENT**

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DISCOUNT \$0

(TAX RATE) 0%

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TOTAL \$80

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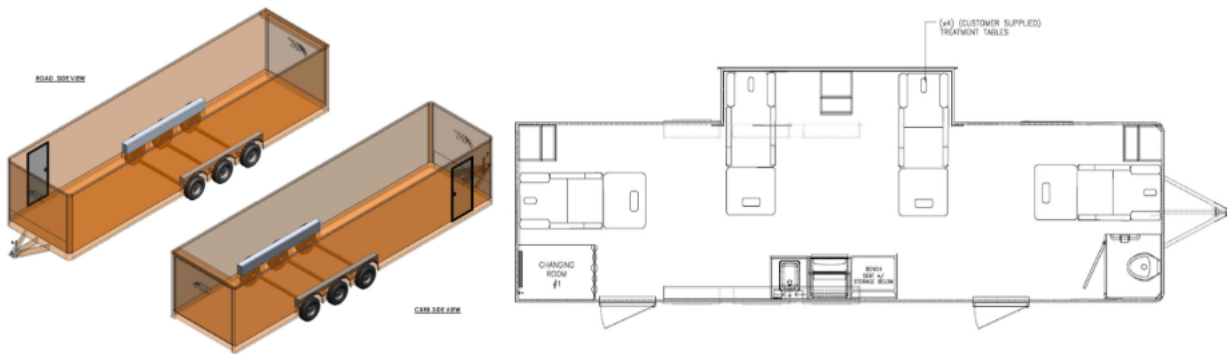
About this document: This is an example email that we will use to gather initial interest in our physical therapy services. The goals of this email are to summarize our business, intrigue the reader, and to acquire meaningful survey data from key stakeholders in their respective companies. Example companies we would target include IBM and Cisco Systems.

Dear _____,

My name is Christopher Adamson and I'm a doctoral student at UNC Chapel Hill completing my final year of physical therapy school. Following graduation this August, my business partner and I will embark on an endeavor to provide physical therapy services to employees working in corporate businesses such as _____.

Were you aware that The Institute of Medicine estimates the total annual cost of chronic pain in medical care and lost productivity for all Americans to be between \$560 and \$635 billion?¹ This includes \$297 to \$336 billion dollars of lost productivity.¹ In addition, they estimated employees lost \$226 billion¹ in wages, while employers losses equated to \$109 billion.¹ This research is cited below.

Our business aims to reverse lost revenue and wages by offering physical therapy services at your facility. To offer you a glimpse into our future, our operation will include a 34ft pull trailer towed by an F250 Super Duty truck. This vehicle would come and go similar to a food truck, where we would only be parked on your private grounds for a predetermined set of time. The vehicle capacity is up to 4 patients an hour with two staff physical therapists on board. This is an entirely standalone operation so not to interrupt your daily processes and we offer multiple payment models to align with your needs.



To keep it simple, all we ask from our employer partners is for permission to park on business premises and allow your employees the flexibility to receive an hour of treatment throughout their workday. The time of day and frequency of appointments is entirely up to the employee/employer agreement. Payment can be made entirely by the employee, or we can negotiate a company rate to include as part of your employee benefit program.

By allowing your employees to participate in physical therapy at their workplace, you will likely reduce their pain, therefore improving their productivity, but it will impress upon them that their employer cares for their well-being. This will result in a motivated and refreshed employee excited to complete their workday. This is an incredibly powerful way to improve employee morale.

If you are intrigued, or simply want to offer advice, we would extremely appreciate if you would fill out this short survey or send us a reply to this email.

<https://www.surveymonkey.com/r/JLHYDQS>

Thank you for your time and we hope to hear from you soon,

Chris Adamson, ATC, CSCS
christopher_adamson@med.unc.edu

Reference:

1. Global Burden of Chronic Musculoskeletal Pain in the Workplace.

https://ihpm.org/wp-content/uploads/2020/05/ChronicPain_2018_Pfizer_IHPM.pdf

