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MEMORANDUM

To: Kyle Wolf

From: R. Lyden Williams, Analyst

Date: December 19, 2016

Subject: **Pharmacy Study**

As part of the FY17 Adopted Budget for Cardinal/CenterPoint Authority Services, the County allowed some of its service allocation dollars to go towards a study of the Forsyth County Department of Public Health Pharmacy. The 4 key areas of focus were to: 1) Understand the net income reported by the pharmacy in recent years; 2) Understand the actual costs to the county to meet the pharmaceutical needs of its indigent citizens; 3) understand the impact of the CPHS(Cardinal Innovations) Pharmacy Assistance Program on pharmacy operations and costs; and 4) understand the trends in needs of Forsyth County residents served through the pharmacy. While these were the primary goals of the study, the consultant also addressed the short and long-term external factors affecting the Pharmacy, as well as providing a number of recommendations regarding ways to improve operational practices.

Cardinal Innovations contracted with the company 'Mostly Medicaid' and their lead consultant, Mr. Clay Farris. A number of County departments and Cardinal/CenterPoint staff assisted Mr. Farris during his study. The consultant provided 13 key findings and related recommendations for each finding. In total, Mostly Medicaid outlined 27 recommendations, some short-, others long-term), related to the 13 key findings. The findings and recommendations are attached.

The County and CenterPoint Human Services (Cardinal Innovations) have a long partnership in meeting the needs of clients with behavioral illnesses, and the drugs are paid for using what has long been called Maintenance of Effort (MoE) dollars. With the merger with Cardinal Innovations, there was confusion around how behavioral health drugs are actually paid for. The consultant was asked to determine the actual costs to the County of operating the pharmacy and provide other analysis of pharmacy operations and its impact for indigent citizens in Forsyth County.

The Public Health pharmacy's main dispensing services are for behavioral health drugs, however, other clinics within the Public Health Department use the pharmacy for their medication needs as does EMS for their pharmaceuticals (particularly Narcan) needs.

The report found that when taken as a whole, the pharmacy operated by the Forsyth County Department of Public Health provides a critical public good for the indigent residents of the county requiring behavioral health drugs. The study determined that through a combination of revenue earned from drug sales, leveraging discounted pricing for public health drugs, and a robust pharmacy assistance program in which

drug manufacturers donate certain behavioral health drugs free, the pharmacy has provided more than 62,000 prescriptions for behavioral health drugs at no cost to indigent clients over the past three fiscal years. Additionally, to the drugs purchased by Forsyth County, more than $7.8 million of drugs have been donated by manufacturers and provided to indigent clients during the same period.

While revenue generated from drugs sold to other payers helps to reduce operating costs and pay for some of the drugs given away, the County does spend more on drugs than the revenue taken in due to the costs of some of the drugs provided free to indigent citizens. The "loss" for each of the last 5 fiscal years range from a low of $218,000 to $701,000. The loss for FY 2016 was $240,000. However, according to the consultant, the loss is not at the Public Health pharmacy level, as the pharmacy itself operated efficiently, and in fact, generates enough revenue from other payers to offset some of the costs of the drugs provided for free.

To understand how the Cardinal/CenterPoint Indigent Client Drug Program and Pharmacy Assistance Program (PAP) works, and its impact on the County is financially, it is helpful to have some background information. The CenterPoint Indigent Client Drug Program is a service provided by CenterPoint (Cardinal) & Forsyth County to indigent Forsyth County residents that allows them to receive behavioral health medications at very low or no cost based on a sliding scale as determined by income. The program is administered entirely by CenterPoint/Cardinal staff. Program-eligible clients, as determined by a CenterPoint/Cardinal assessment, receive a voucher to take to the Public Health pharmacy to receive their medications for a sliding scale co-pay, or for free if eligible. In the past, the co-pay was collected by CenterPoint/Cardinal staff and used to fund lab tests and other high cost services for indigent clients. Beginning in July 2016, the County pharmacy staff began collecting these co-payments and used to offset the pharmacy operating costs. The program costs to the County has been the wholesale costs of the medications dispensed as part of the program. For example, a client may be eligible to receive a behavioral health medication for no cost based on the sliding scale system established by CenterPoint/Cardinal. That client receives their medicine for free from the pharmacy, and the Pharmacist codes the transaction as MHP0, meaning the County receives no revenue for that prescription. The costs for this program to the County, as determined by the study, are as follows: FY14 $404,403, FY15 $361,709, FY16 $292,145. Over the last several years, the costs have trended downward, and this trend continues in FY17 especially with new copay revenues further offsetting operating costs. The projected net County dollars for the program for FY17 is estimated to be roughly $70,000.

The PAP program functions similarly, except that medications are provided at no cost to the County or clients since the medications are donated by pharmaceutical companies. The consultant recommends the County and CenterPoint/Cardinal expand this program to the extent possible due to the $0 cost impact. The County pharmacy distributed over $2.6 million of PAP drugs in FY16.

One question that has been asked by County management relates to the true profit/loss of the pharmacy. The study found that that the operating loss the pharmacy experiences is attributable to the 'public good' programs provided by the County for which there are no offsetting revenues (i.e. Public Health Clinics, Indigent Client Program, EMS). Below is a table showing the net loss for the pharmacy vs. the drug costs for providing these 'public good' programs. The table shows that the pharmacy has begun to operate profitably when removing the costs for non-revenue generating activities. The revenues for the pharmacy come from the sale of medications that are billed to Medicaid, Medicare, private insurance, or patient pay.

	Net Pharmacy Loss	Expenditures for FC Programs	Net
FY2014	($701,699)	$647,377	($54,322)
FY2015	($599,381)	$615,607	$16,226
FY2016	($240,429)	$544,465	$304,036

The study also found that while the pharmacy does operate at a loss, it can be attributed to non-revenue generating programs that likely could not outsourced for a lesser cost. The study also makes several recommendations to Public Health staff on innovative ways to increase revenues and expand services. Moving forward, staff will continue to monitor the financials of the Pharmacy to ensure revenues are maximized and expenditures minimized to the extent possible while maintaining current levels of service to Forsyth County citizens.

The study also determined that while the number of prescriptions filled by the pharmacy have gone down over the past couple of years, it was the result of two high-prescribers departing the system. The consultant indicated that with the opening of the Crisis facility, the downward trend of prescriptions filled is expected to turn around. The consultant recommends that the County not contemplate exiting the pharmacy business for at least 12 to 18-months of operations of the new Highland Center in order for a new trend to emerge on its impact to the Public Health pharmacy since this new facility will not have an operational pharmacy onsite.

This is a very brief synopsis of the pharmacy study. The full study is available and the following pages provide the key findings along with recommendations to address those findings.

If there are further questions, please let me know.

Grid of Key Findings and Recommendations

#	Key Finding	Related Recommendations
1	The overall volume of prescriptions filled at the FC Rx has been declining steadily since FY 2012. There was a total decrease from FY 2012 to FY 2016 of 8,533 prescriptions per year (a 17% decrease for the period).	1. Plan for the impact of departing top prescribers to begin to be offset in FY 2017 with the opening of the new Highland center. The downward trend observed in overall volume across programs and payers is expected to turn around for programs funded by FC based on this analysis. (See especially Hypothesis 2)
2	Prescription volume for most programs decreased, with the most noted decreases in Medicare, patient direct pay, and the Cardinal PAP program. BH drugs funded by FC remained consistent, with a slight decrease in FY 2016. Scripts for Medicaid increased substantially from FY 2015 to FY 2016.	1. For planning purposes related to the BH drug needs of FC clients, it is recommended that the FY 2015 trend (prior to the full impact of prescriber departure) be used as a starting point. The total BH need to be met by FC should also be expressed as the combination of the FC BH program and the Cardinal PAP program (approximately 17,000 scripts in FY 2015).
3	Recent aggregate cost trends for FC BH drugs have decreased from $404,000 in FY 2014 to $292,000 in FY 2016 (28%), while the aggregate cost of FC PH drugs program increased from $59,000 in FY 2014 to $98,000 FY 2016 (66%). Based on discussions with the pharmacy team, much of the public health cost increase is driven by pricing of one birth control patch.	1. To maintain more consistent monitoring of trends, FC should implement a quarterly reporting mechanism for costs of drugs paid for by FC. Quarterly reporting should include total aggregate spending by program (PH, BH, EMS). Annual reporting should include YOY trend analysis, including an analysis of top drugs and cost drivers. 2. For BH client needs, FC should implement an annual needs assessment to coincide with other annual collaborative planning with Cardinal. Cardinal has an existing standard procedure for this type of annual planning at the local level which could be used as a starting point for FY 2017/2018 joint planning discussions.
4	The aggregate valuation of drugs provided at no charge (from both the PAP and other manufacturer donation programs) to FC has steadily decreased each of the last 3 FYs, but still accounts for more than $2M worth of drugs provided to FC residents at no cost to the client or to the county.	1. Consider developing a strategy to expand PAP and other donated drugs programs, given the high value observed in all years of the analysis. The focus of PAP expansion should be on BH drugs, given their higher relative cost. It is also important to note that, while BH drugs are on a current declining cost trend,

#	Key Finding	Related Recommendations
		any new BH drug introduced to the market could have substantial and immediate cost increase implications. The importance of continued focus on PAP will also help to account for expected increases in drug costs moving forward, as well as minimizing costs for current BH drug needs. 2. There are also opportunities to expand PAP to cover medical drugs. While current pharmacy operations do not dispense a significant number of medical drugs (such as those related to primary care), there may be an opportunity to meet additional needs of FC indigent residents using donated drugs under an expanded PAP program.
5	Medicaid revenues have become increasingly important to meeting the needs of FC residents, growing from $807,000 in FY 2014 to $1,091,000 in SFY 2016 (a 25% increase).	1. Consider developing a strategy to assist uninsured clients with the Medicaid application process to ensure coverage and payer mix is optimized to meet client needs. Such a process would be similar to those used by hospitals for potential Medicaid applicants. Estimating the potential Medicaid coverage rate of uninsured should be done in the early stages of such a strategy. Using state level Medicaid uptake rates, a conservative estimate suggests that an additional $108,000 of annual Medicaid revenue is possible using a strategy to help enroll indigent clients who are eligible for Medicaid but not yet enrolled. The FC DPH should explore the current Medicaid uptake rate in FC with colleagues in the local Medicaid eligibility processing unit.
6	Although there are multiple payers and programs being utilized to meet the pharmaceutical needs of FC residents, 4 out of every 5 scripts is for a BH condition. This suggests that pharmacy operations are most focused on meeting behavioral health needs of the FC indigent population, and that the most intense pharmaceutical needs of the FC population are related to BH.	2. Given the prevalence of BH pharmaceutical needs observed among the FC indigent population, FC DPH should consider developing an integrated, multi-payer strategy to focus on BH pharmacy needs of county residents. Such a strategy could bring together providers and patient advocates in a population health approach that may identify additional opportunities to meet client needs that are not seen when only done in a fragmented, payer-specific approach. The commonly used "workgroup" model in population healthcare efforts could be utilized, in

#	Key Finding	Related Recommendations
		which a core group of participants establish an ongoing meeting schedule to identify challenges and key tasks need to improve coordination of care among the population. This effort could serve as a connecting point for multiple stakeholder efforts beyond just meeting the pharmacy needs of this population. Key representatives from FC, FC DPH, DayMark, Cardinal, and local patient advocacy groups such as the Mental Health Association in NC should all be invited.
7	When assessed in terms of operational efficiency, the FC pharmacy appears to be operating efficiently. The pharmacy has also begun to be profitable, generating enough margin on revenues from other payers to offset some of the costs of the drugs provided free to the indigent residents. However, when the costs of the drugs provided to indigents citizens for free is include, the pharmacy appears to have been operating at a net operating loss each year in the available data (FY 2011 to FY 2015). The losses ranges from $218,000 to $701,000 annually. The aggregate loss is largely explainable with drugs costs to supply non-revenue programs (including the FC PH, BH and EMS programs). There are also other opportunities to reduce costs of drugs given away, including savings from applying for an extension to the FC DPH 340B grant to allow BH drug purchasing discount. If FC DPH were to obtain this approval, annual BH drugs costs could be reduced by as much as $146,000. To obtain these savings, FC DPH would need apply for an extension to its 340B grant to cover BH drugs under the 340B program. Such an extension requires partnership with a Federally Qualified Health Center (FQHC) or similar entity. Based on discussions with DPH, the most likely partner would be the Southside FQHC. This facility is approximately 4-5 miles away from the currently prescribing and	1. Since the decision to provide BH drugs to indigent residents for free is made at the county level, the costs of those drugs should not be applied to pharmacy financial analyses. 2. There are opportunities for improvement in the reporting of pharmacy costs. Moving forward, FC DPH should report annual expenses of each FC funded Rx program separately to ensure clarity in the size of the FC investment for each program. This approach will also allow clarity between the drug inventory costs of a program and other operating expenditures required to operate the pharmacy. 3. Additionally, now that it has been clarified that FC is the payer of the FC BH drug program, team members should continue to ensure that the best available pricing is being obtained for BH drugs. In addition to the potential savings shown in the analysis, there are updates to 340B regulations that may allow for deeper discounts on certain drugs. As of August 2016, HRSA has promulgated new 340B rules designed to address issues with covered entities being overcharged. There is renewed focus on maximizing 340B savings on all drugs.[1] As discussed in the related finding, FC DPH may be able to apply for a grant extension to obtain even deeper discounts, but the operational changes required to obtain the approval may outweigh the

[1] http://www.hrsa.gov/opa/

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	dispensing locations (DayMark and the FC DPH pharmacy), so it may not be operationally feasible to transition operations to be nearer the FQHC and obtain the annual 340B savings on BH drugs.	savings. FC DPH should provide a preliminary analysis to FC management explaining the potential savings, the steps taking to assess the changes needed to obtain those savings, and what the net savings would be. 4. There may be an opportunity to collaborate with Cardinal on a formulary for the FC BH program to ensure costs and generic efficiency are maximized. 5. Finally, since the net operating loss is in effect the size of the investment in a public good, FC DPH should provide annual numbers on the number of drugs provided for free to clients as well as related information about the impact on the lives of FC residents. These data will help to communicate to the public the value and success of the FC BH program.
8	When the overall picture of BH drugs for indigent FC residents is considered, the Cardinal PAP program consistently contributes nearly 80% of the drugs needed (in terms of costs). Put another way, without the CPHS PAP program, FC would spend 4 times the amount it does today to meet the needs of the indigent FC residents purchasing the same drugs. Based on initial analysis, the cost of the PAP program is likely less than $120,000. The ROI is thus nearly 10 to 1 for each year in the review.	1. Given the significant cost avoidance impact of the PAP program, FC should ensure continued investment in the maintenance of current efforts as well as potential enhancements. While the current delivery model for care is focused on prescriptions originating from BH providers at DayMark operating an outpatient facility (and this provides few non-BH prescriptions for clients presenting with BH needs), upcoming changes related to the new Highland Avenue Center may introduce additional types of prescriptions. This possibility is because providers at the new center will likely be able to observe a broader range of client needs compared to those observed in a typical, scheduled outpatient therapy visit (such as those occurring at DayMark today). 2. FC DPH should consider expanding the PAP program by reviewing opportunities for non-BH drugs, as well as revisiting current manufacturers opportunities. Given the ROI observed in the last three years, additional investment in PAP is warranted.

#	Key Finding	Related Recommendations
9	Departure of top prescribers at the DayMark facility has been a significant driver of overall script volume decreases.	1. Anticipate that introduction of additional prescribers at the new Highland facility will likely begin an upward trend in overall script volume, perhaps returning to pre-2014 levels.
10	A change towards dispensing scripts with a higher day supply did reduce the number of scripts overall, with the biggest contributors being 90 day and 112 day supply scripts. The overall reduction caused by this trends is estimated to be about 1,259 scripts per year.	1. When considering trends in script volume at the pharmacy, do not expect reductions due to this trend to be replaced. However, the overall trends are expected to be a net increase due to factors in other findings.
11	Using the best available data, the FC Rx could see an increase of between 2,900 and 3,800 scripts annually, depending on the degree of replacement rate for lost DayMark prescribers and the average script volume resulting from the new patient visits at the new Highland Avenue center. Using the average per script cost for FC BH drugs for indigent clients over that past 3 FYs, these additional scripts would likely create an additional annual cost between $56,000 and $73,000. Note: Dollar figure estimates are provided for high level planning purposes only and can be greatly impacted by changes in pricing for drugs and new drugs coming on the market.	1. Conduct collaborative, detailed planning sessions with the implementation team for the Highland Center to better understand the potential impacts to FC pharmacy volume. 2. For planning purposes for FY 2017 and 2018, assume substantial increased volume in scripts for FC Rx. 3. Stakeholder teams should develop a provider education strategy to equip new prescribing prescribers with information about the PAP program (as well as remind existing DayMark providers about the benefits).
12	The precise impact on clients of moving pharmacy operations outside of FC Rx and into other pharmacies (through a subcontracted arrangement) is unable to be determined at this time. If FC does choose to move pharmacy operations at a later time, there are multiple options to meet the needs of FC residents in other locations. Each option will need to be assessed in terms of price competitiveness and risks.	1. Based on the expected upcoming changes in the near term related to the launch of the Highland Avenue Center, it is recommended to not move forward with detailed exploration of moving pharmacy operations now. Additionally, analysis in the financial analysis section suggests that FC DPH has operated pharmacy efficiently in recent years. There is a consensus that private section options would not be price competitive, but this consensus should be verified with a limited RFI process. The volume data analyzed in this report can be used for vendors as a starting point, and the decision framework provided here can be used to assess initial cost comparisons. This can be accomplished by contacting a short list of potential subcontracting partners in

#	Key Finding	Related Recommendations
		area to determine how a subcontracting arrangement might work, beginning with partners in the top zip codes identified. 2. If FC does decide to pursue changing the location of pharmacy services at a future time, team members should conduct planning exercises to identify steps to lessen negative impact on fill rates in the event of altering pharmacy location and operations. 3. In addition to local retail pharmacies, there are other subcontracting options with 3rd party pharmacy providers, such as Genoa, which is operating pharmacy "kiosks" in NC already for similar purposes.
13	The impact of the recent change in copay collection policy cannot be fully modeled at this time, but there is sufficient recent to believe there will be a negative impact on clients requiring BH drugs. This impact arises from reduced access to labs required for effective treatment and disruptions in long-standing routines for clients. There may be an expected increase in crisis events for FC BH clients due to removal of lab services that could inform care management. There may also be a new risk introduced related to accurate calculation and collection of the copays if the FC rx team does not have the necessary client-level income data to calculate appropriate copays.	1. FC should consider developing a plan to fund the needed labs for FC indigent residents taking drugs requiring labs, and for other labs that were previously funded by the CenterPoint model using copays. Continuation of the current policy (by FC Rx) without a plan to address the gap created by the change in policy will likely cause additional crisis events and incur greater costs to FC beginning in the early part of CY 2017. 2. If the recommendation is not selected, it is highly recommended that clients impacted by the change be identified and tracked in the claims data to identify resulting events (or hopefully help prevent them through proactive engagement). 3. The complexities of the 4-tier copay calculation process suggest that FC pharmacy should document its method used to collect the copays now under its management to ensure accuracy and appropriateness based on client income. 4. FC DPH should consider implementing a notice timeframe policy for any change that impacts clients. Similar changes in most healthcare environments would require a 30 to 60-day notice to clients, including communications to the clients directly.