**HSCRC Transformation Grant**

FY 2018 Report

*The following report is prepared for the HSCRC for FY2018. This summary report will include a summary narrative, requisite information pertinent to Transformation Grant funded and related activities, a budget report, and budget narratives.*

**Background**

Patients contending with chronic and/or life-threatening illnesses face a myriad of barriers and challenges when attempting to access necessary care. These barriers result from the increasing complexity of the US healthcare system. Patients must navigate multiple payers, providers, and sometimes competing treatment regimens all while possessing differential levels of health literacy as well as limited tangible and/or social resources. The proliferation of health disparities is a consequence of this convergence of complexity and variable individual status. Consequently, emergent mediums of care coordination, patient navigation, and resource facilitation have become viable remedies to closing gaps in care that would otherwise drive unnecessary cost and healthcare service utilization.

The report that follows will outline LifeBridge activities funded by the HSCRC Transformation Grant. This grant has been instrumental in not only starting a much needed suite of services for our patients, but also in promoting collaboration with our Baltimore City and County partners in order to coordinate care for our potentially high-risk patients. We are pleased to report our progress to date in conjunction with proposed programmatic next steps.

**Overall Summary of LifeBridge Activities**

***Introduction***

LifeBridge (LBH) Health has an established track record of successful program development for community-based initiatives aimed at engaging with high-risk and psycho-socially complex and vulnerable populations. Prior to the receipt of Transformation Grant funding, LBH possessed a range of established and emergent programs at all of its hospital locations: Sinai Hospital of Baltimore, Northwest Hospital, Levindale Hebrew Geriatric Center and Hospital, and Carroll Hospital. Each hospital entity sponsored a host of programs, including prevention-based interventions, geriatric behavioral health day programs, chronic disease management services, and palliative and hospice care programs.

As mentioned in our previous report, LBH possessed a community-based framework prior to acquisition of this grant. Consequently, our aim was to further strengthen and align our Care Coordination, Community Initiatives and Population Health work. The following narrative outlines the current status of the LBH Community Care Coordination Program in conjunction with proposed next steps for program development.

# ***Program Description***

The LBH Community Care Coordination Program is a strategic initiative that engages with high utilizers of costly health care services, addressing structural barriers to health and supporting patients to utilize more appropriate levels of care and community-based supports. Transformation Grant funds support the Care Coordination Team which services patients accessing care at Sinai and Northwest Hospitals and their respective catchment areas. This team is an interdisciplinary team comprised of nurses and social workers. During fiscal year 2019 we will be adding and have already hired 1 Manager, 1 RN, 1 SW, and 2 community health workers to our current staffing matrix.

At Carroll Hospital, the Transformation Grant Funds have been equally instrumental in growing and enhancing an established program that predates the Sinai initiative. The addition of an experienced behavioral health specialist to focus on patients with behavioral health needs has helped to fill a critical identified need for our community. Furthermore, providing a care coordinator to focus on a specific population of aging patients in an independent Care Continuum setting (Carroll Lutheran Village) has allowed us to explore the needs of that population and how our partnerships with community agencies can strengthen the services offered.

# Program Goals

As mentioned in our previous report, the Community Care Coordination Program as well as the Carroll-based programs have collectively retained the following programmatic goals:

1. Reduce preventable IP and ED utilization and lower readmission rates
2. Reduce the total cost of care
3. Increase screenings for proactive identification of risk
4. Enhance care coordination services for high-risk patients with complex medical and/ or psycho-social needs

# ***Strategic Approach***

Our collective efforts rely upon five core elements:

1. Patient Identification and Outreach
2. Patient engagement/services
3. IT Infrastructure
4. Staff Education
5. Program Integration

*Since our previous report, we have continued to refine our processes for patient identification and outreach and undergone various iterations of leveraging our electronic health record to track our progress with our patients. These tactics for patient identification and outreach will be further elaborated upon in the body of the following narrative.*

# **Target Population**

We continue to target our Medicare populations that access care from the various points within our continuum of care. At the start of our program, we worked in conjunction with our Business Intelligence team to identify high utilizer patients through leveraging CRISP data which in turn produced a *high utilizer list*. This list was used as a primary tactic to prioritize patients for outreach. While this list did initially generate some noteworthy and appropriate referrals for our program, our team found that the lack of real-time access to these patients created a barrier in connecting them with the right level of intervention and care. Consequently, we had to identify more proactive strategies to align with parallel care coordination initiatives within our system in order to effectively engage with these patients.

Patient referrals for the Care Coordinator at Carroll Lutheran Village (CLV) and the Carroll Behavioral Health Navigator are generated automatically and by staff throughout the residential community (CLV) and the system (for both programs). For Carroll Lutheran Village Care Coordinator and the Behavioral Health Navigator, The CARE documentation system at Carroll generates referrals, as do other hospital reports. Staff from outpatient offices and Carroll Lutheran Village, as well as self-referrals, will trigger an assessment to determine services with a new or existing patient. For the Behavioral Health Navigator, the care documentation system and hospital reports will trigger an assessment; as will direct referrals from hospital staff, outpatient providers, and community agencies – as well as self-referrals.

As our program has matured, we have continued to integrate with inpatient care management staff at all hospital sites to include alignment with inpatient, emergency department, disease management clinics, primary care, specialty care, post-acute providers, and population health programs. Our *typical patient* experiences simultaneous challenges with management of chronic illness and is also very likely to contend with resultant behavioral concerns as well. We have found that a majority of our patients experience psycho-social concerns to include housing, transportation barriers, poor health literacy – all in conjunction with their chronic medical conditions. The co-occurring complexities tend to exacerbate one another thus driving utilization of emergency and acute services. Disrupting this complex cycle necessitates comprehensive wrap-around services provided by our care coordination teams to effectively triage patients to the appropriate level of care and then to subsequently navigate that level of care.

Regional Partnership Information

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| --- | --- |
| **Regional Partnership (RP) Name** | **Community Health Partnership of Baltimore** |
| **RP Hospital(s)** | LifeBridge Health – Sinai Hospital of Baltimore, Northwest Hospital, Carroll Hospital |
| **RP POC** | Sharon McClernan, RN, BSN, MBA, MHA  Vice President for Clinical Integration  AVP of Population Health  [sharong@carrollhospitalcenter.org](mailto:sharong@carrollhospitalcenter.org) |
| **RP Interventions in FY 2018** | * Community Care Coordination Program – Sinai Hospital of Baltimore * Care Navigation Team – Carroll Hospital |
| **Total Budget in FY 2018**  *This should equate to total FY 2017 award* | LBH Grant Award – $1,215,365  Sinai – $636,198  Northwest - $357,754  Carroll - $221,404  *Please see attached budgetary documents for information on program expenditures* |
| **Total FTEs in FY 2018** | The following staff members were employed via Transformation Grant dollars:  ***Sinai Hospital & Northwest Hospital***   * Director of Community Care Coordination, 1.0 FTE * RN Care Coordinators, 2.0 FTE * Social Workers, 2.0 FTE * *Please note that 1 Sinai FTE was funded via LBH dollars but worked in collaboration with the CCC Team*   ***Carroll Hospital***   * Behavioral Health Navigator, 1.0 FTE * RN Care Navigator at Carroll Lutheran Village, 1.0 FTE * Please note that funding for this position was dually funded through the Transformation Grant (50%) and LBH (50%) respectively   ***Resource Available to All of LBH***   * Call Center Specialist, 2.0 FTE   **Total FTEs Employed: 8.5 FTEs** |
| Contracted: 0 |
| **Program Partners in FY 2018**  *Please list any community-based organizations or provider groups, contractors, and/or public partners* | Program Partners through the CHPB:   * Johns Hopkins Bridge Team * Healthcare for the Homeless Convalescent Care * Patient Engagement Training * Johns Hopkins Home-Based Primary Care * Community Care Team * Carroll County Health Department and The Partnership for a Healthier Carroll County * Lifebridge Health and Carroll ACOs and the Lifebridge Clinically Integrated Network * The Lifebridge Health Skilled Nursing Facility Collaborative |

# Overall Summary of Regional Partnership Activities in FY 2018

Award of the Transformation Grant has enabled greater collaboration with our Baltimore city-wide partners via the Community Health Partnership of Baltimore (CHPB). Collaboration between peer hospitals and community-based agencies has been invaluable with respect to refinement of our methodology and tactics for engagement with high-risk patient populations. The CHPB, funded through a parallel Transformation Grant, features many offerings for high utilizers. This partnership enables the sharing of key programs and resources aimed at supporting complex and vulnerable patient populations. Each partner (identified below) offers a suite of services to LBH. See below for relevant updates related to LBH’s contacts with these offerings to date:

* + ***Johns Hopkins Bridge Team***: Successfully facilitated working connections between this program and outpatient psychiatry, inpatient gero-psychiatry (at Levindale), and inpatient psychiatry in addition to ongoing connection with the care coordination teams.
  + ***Healthcare for the Homeless Convalescent Care***: We continue to enhance continuity of care between LBH Care Coordination and ED Navigation and HCH through alignment between high-risk patient rounding processes. We have made additional connection with Behavioral Health and Outreach program within HCH.
    - * + ***Patient Engagement Training***: Successfully trained all Care Coordination staff and significant portions of Care Management Staff at Sinai and Northwest Hospital in this type of engagement tactic. Our program has identified programmatic champions to continue to amplify this effort to support rapport- building with complex and high-risk patient populations.
  + ***Johns Hopkins Home-based PCP***: Successfully completed programmatic negotiation for this program to receive referrals from the 21215 zip code which is one of the primary catchment areas for high-risk patients serviced by Sinai. Moving forward, we will continue to partner with this program to service parallel high-risk areas in need of this type of intervention.
  + ***Community Care Team***: To date, LBH has had a very successful partnership with this program and has ***consistently remained at or exceeded 85% program capacity* (capacity = 120 patients)**. Patients are defined as eligible for this program if they are Medicare FFS, Dually Eligible and had 3+ hospital contacts within 12 months from the requisite targeted 19 zip codes within Baltimore City. Overall LBH has outperformed its peer hospitals within this particular tactic anchored around management of high-risk patients.

The LBH team in conjunction with the CHPB Group has continued to partner and collaborate around pertinent programmatic opportunities and challenges to include management of analytics, data integrity, advertisement of services to the community, and around outreach efforts to rising risk and high-risk patients. LBH continues to participate in CHPB partnership activities to include the Operational Committee, the Analytics Committee, and the Steering Committee.

# Intervention Program

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| --- | --- |
| **Intervention or Program Name** | Community Care Coordination Program |
| **RP Hospitals Participating in Intervention**  *Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.* | Sinai Hospital (core program sponsor) and services have also been extended to Northwest Hospital and to Carroll Hospital. All hospitals are part of the LifeBridge Health System. |
| **Brief description of the Intervention**  *2-3 sentences* | The LBH Community Care Coordination Program is a strategic initiative that engages with high utilizers of costly health care services, addressing structural barriers to health and supporting patients to utilize more appropriate levels of care and community-based supports. Transformation Grant funds support the Care Coordination Team which is an interdisciplinary team now comprised of nurses, social workers, and community health workers. The overall goal of this program is to reduce the total cost of care for this high-risk population by reducing IP and ED encounters through the provision of wrap-around services. |
| **Participating Program Partners**  *Please list the relevant community-based organizations or provider groups, contractors, and/or public partners* | Program Partners through the CHPB:   * Johns Hopkins Bridge Team * Healthcare for the Homeless Convalescent Care * Patient Engagement Training * Johns Hopkins Home-Based Primary Care * Community Care Team * Carroll County Health Department and The Partnership for a Healthier Carroll County * Lifebridge Health and Carroll ACOs and the Lifebridge Clinically Integrated Network * The Lifebridge Health Skilled Nursing Facility Collaborative |
| **Patients Served**  *Please estimate using the Population category that best applies to the Intervention, from the CY 2017 RP Analytic Files.*  *HSCRC acknowledges that the High Utilizer/Rising Risk or Payer designations may over-state the population, or may not entirely represent this intervention’s targeted population.*  *Feel free to* ***also*** *include your partnership’s denominator.* | # of Patients Served as of June 30, 2018:  *Please note that metrics provided are specific to Sinai/ Northwest Care Coordination Work*  ~300 patients referred for care coordination services and/ or received contact or needs assessment by Care Coordination Program |
| Denominator of Eligible Patients:  *Please note that metrics provided are specific to Sinai/ Northwest Care Coordination Work*  The overall total potential population is **89,358** which is based upon the criteria 2+ IP or Obs>=24 or ED Visits Medicare FFS which consists of **12,366** patients.  Source: *RP Analytic File 01JAN17 - 31DEC17 Yearly*  *Please note that these metrics are not necessarily indicative of program-specific case surveillance and patient identification that may result from leveraging CRISP and/ or alternative provider referral sources etc.* |
| **Pre-Post Analysis for Intervention** **(optional)**  *If available, RPs may submit a screenshot or other file format of the Intervention’s Pre-Post Analysis.* | *Not included in this report* |
| **Intervention-Specific Outcome or Process Measures**  **(optional)**  *These are measures that may not have generic definitions across Partnerships or Interventions and that your Partnership maintains and uses to analyze performance.*  *Examples may include: Patient satisfaction; % of referred patients who received Intervention; operationalized care teams; etc.* | *Not included in this report* |
| **Successes of the Intervention in FY 2018**  *Free Response, up to 1 Paragraph* | To date we have achieved operational successes and programmatic successes to include the following:   * Establishment of a centralized 601-CARE line that is staffed 24/7 to manage Care Coordination needs servicing Sinai and Northwest. We will be extending this service to Carroll as well to complement the existing Care Connect Line for patient in Carroll County. * Development of a Cerner-based referral to assist in management of programmatic referrals * Piloted an initiative to provide care coordination wrap-around services to patients placed in Post-Acute Care/ SNF settings to mimic the services offered at Carroll Hospital. Preliminary results of this initiative demonstrated a decrease in hospital readmissions at every SNF where care coordinators were deployed * Creation of an internal LBH Dashboard to monitor operational care coordination program activities on a monthly basis * Establishment of key alliances with PCPs, specialty clinics, and disease management programs and the development of Clinical Pathways for several chronic disease states. * Design and delivery of resident education on subjects pertinent to Care Coordination * Design and delivery of care management education on the subjects of clinical transformation and system-wide care of high-risk patients   Please note that programmatic successes specific to the CHPB partnership are also listed in the section outlining Regional Partnership Activities in FY 2018 |
| **Lessons Learned from the Intervention in FY 2018**  *Free Response, up to 1 Paragraph* | Our front line staff has observed some consistent trends with the patients serviced by this program. Identification of rising risk and high-risk patient in real-time is a continuous challenge. Consequently, there is a need for strategic outreach and engagement to patients that would benefit from care coordination services. Second, access to affordable housing is a consistent problem experienced by an overwhelming majority of our patients. Many of our patients are unstably housed and/ or their income is being pooled to support a familial household. Consequently, when a patient’s health declines and they have to move to a supportive living environment, the whole household is disrupted by the loss of income. Chronic financial instability is experienced by an overwhelming majority of our patients as well. This persistent financial instability results in higher levels of individual stress and exacerbation of health concerns. Lastly, a continuous review of our patient panel reveals that almost all of our patients served have experienced complex trauma. A trauma history yields direct consequences to one’s health status and to one’s willingness to seek help and access care. Our staff continues to report that health encounters for patients with a complex trauma history can be highly triggering. This repeat observation continues to underscore the need for continued prioritization of Behavioral Health Support and for providers to operate from a trauma-informed model. This is a subject that we will continue to explore given that it has a direct connection with patient- rapport and relationship building. |
| **Next Steps for the Intervention in FY 2019**  *Free Response, up to 1 Paragraph* | Moving forward, we will continue to prioritize this initiative and explore and employ best-practices to support the management of high-risk patients. During FY 2019, we will add additional staff members to include an RN, SW, 2 Community Health Workers, and a Managerial position in conjunction with an Education staff member. Due to the timing of and closure of this past fiscal year we did not include these FTE expenditures. Scaling this program will necessitate continued collaborative partnerships with all of the providers cited in this report. Program scaling will occur at all sites to include Sinai, Northwest, and Carroll. Additionally, our forthcoming Cerner-based HealthCare platform will impact our workflow and processes for management of patients. With this new platform we will be able to stratify patient- risk and acuity and to leverage this tool to support the delivery of clinical and psycho-social care for our patients. It is also important to note that this transition will be enterprise-wide. Migration to a common platform for all of our care coordination needs will enable greater system-wide standardization of patient care. We will likely not be able to report on the implementation of this platform until 2019. We also continue to explore the need for more wrap around services such as expansion of our Palliative Care programs into the community as well as added pharmacist support to our teams. Lastly, in the coming months, we will also continue with the implementation of core educational programs to support the generation of quality-based outcomes. |
| **Additional Free Response** (Optional) | We would like to provide the following patient success stories from each of our sub programs within the LBH Community Care Coordination Program as exemplars of programmatic impact:  ***Community Care Coordination Success Stories (Sinai/ Northwest)***  ***Success Story from Community Care Coordination Program***  Ms. T is a 90yr. old AA woman with a PMH of HTN, HLD chronic leg edema, severe kyphoscoliosis, cataracts and significant fall on a ladder in 2011. Upon enrollment, Ms. T was only linked to primary care, physical therapy, and ophthalmology and had a limited support system consisting of her neighbor, Mr. E, who had difficulty helping her navigate the system. Ms. T also presented with symptoms of dementia and paranoia and reported alleged financial exploitation. Ms. T’s goals were agreed upon as safety, self-management, obtaining adequate DME/DMS; obtaining adequate transportation, and achieving physical therapy goals.  Since enrollment, the CCC team has assisted Ms. T with linkage to cardiology per PCP recommendation related to frequent edema. Ms. T has completed her physical course and is in the process of obtaining high grade compression stockings to assist in edema reduction along with prescribed medication and follow up with PCP. The CCC team has accompanied Ms. T to PCP and specialty appointments and assisted her in recommended follow- up and directives. Ms. T has been referred to the Community First Choice program for community and home support where she has received her AERS assessment and has been assigned a support planner who is aware that her neighbor is interested in being the paid caregiver. The CCC team has coordinated mobility documentation and there was a mobility interview in April 2018. Ms. T attends all scheduled appointments, understands her medications, and takes them as prescribed and has not been hospitalized or utilized the ED since being enrolled in the CCC program. Ms. T appears to be in a safe environment and there is no suspicion of financial exploitation.  ***Care Navigation Success Stories (Carroll)***  ***Success Story from Behavioral Health Navigator***  Patient has an extensive history of high utilization of the hospital and poor follow-through on aftercare plans. I had previously referred patient to Mosaic Day Program and Outpatient Clinic but patient rarely attended the program or appointments. Patient recently moved and could therefore no longer attend Mosaic treatment services. Although patient had rarely attended Mosaic appointments in the past, she was now disconnected from any and all of her BH providers. Patient was referred to another local day program, but patient was not accepted due to the collateral gained from Mosaic, reporting her history of non-compliance. Patient was referred for mobile treatment and she was denied due to her having gone to Mosaic in the past without being discharged for non-compliance. I advocated for mobile treatment services for patient, discussing her poor follow-through with outpatient services and regular hospital visits. Patient was then approved for mobile treatment, and was fortunately scheduled to start in one week in order to be reconnected to care.  ***Success Story from Care Coordinator at Carroll Lutheran Village***  Patient suffered a fall and has had extensive debilitation and care from Wound Care Center intervention with multiple appointments weekly.  Care Coordinator provided coordination with Volunteer Coordinator to provide a companion to each and every Wound Care appointment.  Frequent communication was provided to patient for emotional support, encouragement to ease her anxiety and wound healing teaching.  She is progressing quite well and nearly finished her Wound Care treatment. |

# Core Measures

## Utilization Measures

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| Measure in RFP  *(Table 1, Appendix A of the RFP)* | **Measure for FY 2018 Reporting** | **Outcomes(s)** |
| Total Hospital Cost per capita | **Partnership IP Charges per capita**  Executive Dashboard:  ‘Regional Partnership per Capita Utilization’ –  Hospital Charges per Capita, reported as average 12 months of CY 2017 | |  |  | | --- | --- | | LBH | $322, -7.0% favorable variance | | Sinai | $355.51, -7.4% favorable variance | | Northwest | $339.78, -6.3% favorable variance | | Carroll | $251.51, -6.0% favorable variance |   ***See Appendices 1,2,3,4*** |
| Total Hospital Discharges per capita | **Total Discharges per 1,000**  Executive Dashboard:  ‘Regional Partnership per Capita Utilization’ –  Hospital Discharges per 1,000, reported as average 12 months of FY 2018 | |  |  | | --- | --- | | LBH | 10, -0.4% favorable variance | | Sinai | 10.5, -3.2% favorable variance | | Northwest | 10.2, -2.8% favorable variance | | Carroll | 8.5, 13.0% unfavorable variance |   ***See Appendices 1,2,3,4*** |
| Total Health Care Cost per person | **Partnership TCOC per capita – Medicare**  Total Cost of Care (Medicare CCW) Report ‘Regional Partnership Cost of Care’:  ‘Tab 4. PBPY Costs by Service Type’ – sorted for CY 2017 and Total | |  |  | | --- | --- | | LBH | $3215 |   ***See Appendix 5*** |
| ED Visits per capita | **Ambulatory ED Visits per 1,000**  Executive Dashboard:  ‘Regional Partnership per Capita Utilization’ –  Ambulatory ED Visits per 1,000, reported as average 12 months of FY 2018 | |  |  | | --- | --- | | LBH | 40, -3.6% favorable variance | | Sinai | 46.1, -4.0% favorable variance | | Northwest | 42.1, -0.5% favorable variance | | Carroll | 25.6, -1.5% favorable variance |   ***See Appendices 1,2,3,4*** |

## Quality Indicator Measures

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| --- | --- | --- |
| Measure in RFP  *(Table 1 in Appendix A of the RFP)* | **Measure for FY 2018 Reporting** | **Outcomes(s)** |
| Readmissions | **Unadjusted Readmission rate by Hospital**  (please be sure to filter to include all hospitals in your RP)  Executive Dashboard:  ‘[Partnership] Quality Indicators’ –  Unadjusted Readmission Rate by Hospital, reported as average 12 months of FY 2018 | Please note that during the time of completion of this report, the Unadjusted Readmission Rate by Hospital had not yet been published to the Executive Dashboard. In order to respond to this inquiry, we have supplied these metrics via our internal reporting resources. LBH Unadjusted Readmission Rates per CRISP by Hospital site and average are listed below for FY2018:   |  |  | | --- | --- | | ***Hospital Site*** | ***FY18 Average*** | | Carroll | 12.07% | | Northwest | 14.20% | | Sinai | 11.83% |   ***See Appendix 1*** |
| PAU | **Potentially Avoidable Utilization**  Executive Dashboard:  ‘[Partnership] Quality Indicators’ –  Potentially Avoidable Utilization, reported as **sum** of 12 months of FY 2018 | |  |  | | --- | --- | | LBH | $24,382,923, -3.6% favorable variance |   ***See Appendix 1*** |

## CRISP Key Indicators (Optional)

At this time we are continuing to align our care coordination services throughout our enterprise to include continued alignment with our pre-existing Carroll Hospital Care Navigation Team. Within the context of this alignment, we will be working to standardize our integration with CRISP round key processes such as establishment of longitudinal care plans and increased visualization of assigned care managers for each high-risk patient. Each site has historically done a significant body of work with developing care plans. However, moving forward we intend to ensure that there is system-wide implementation and standardization as much of the work has been site and program-specific.

Members of our leadership have actively convened with CRISP contacts during this past fiscal year to discuss the subject of value-adding care plans. One of the over-arching challenges of increasing number of providers onboarding to CRISP is the proliferation of care plans within that that system. CRISP stakeholders have identified a need for hospital and care coordination provider to develop and to adhere to a standardized CRISP care plan. Furthermore, there is a larger need for over-arching governance of those care plans to ensure that they are relevant to the patient’s current status and removed as need to ensure continuity of care. As our system continues to internally align, we intend to continue to create appropriate care plans for our medically and psycho-socially complex patient populations.

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| --- | --- | --- |
| Measure in RFP  *(Table 1 in Appendix A of the RFP)* | **Measure for FY 2018 Reporting** | **Outcomes(s)** |
| Established Longitudinal Care Plan | **% of patients with Care Plan recorded at CRISP**  Executive Dashboard:  ‘High Needs Patients – CRISP Key Indicators’ –  % of patients with Care Plan recorded at CRISP, reported as average monthly % for most recent six months of data  *May also include Rising Needs Patients, if applicable in Partnership.* | *See comments in narrative portion of this section. The aforementioned programmatic outcomes will be reflected on in a future report.* |
| Portion of Target Population with Contact from Assigned Care Manager | **Potentially Avoidable Utilization**  Executive Dashboard:  ‘High Needs Patients – CRISP Key Indicators’ –  % of patients with Case Manager (CM) recorded at CRISP, reported as average monthly % for most recent six months of data  *May also include Rising Needs Patients, if applicable in Partnership.* | *See comments in narrative portion of this section. The aforementioned programmatic outcomes will be reflected on in a future report.* |

## Self-Reported Process Measures

In addition to the process measures captured via the Executive Dashboard, we have also been capturing internal activity-related metrics for our newly-formed Sinai/ Northwest Community Care Coordination Team. To aid in activity evaluation, our Business Intelligence Team has devised an internal dashboard to support operational management of this program. This dashboard tracks value-adding activities of the team such as home visits, appointment accompaniment etc. During this past fiscal year, the Sinai/ Northwest Community Care Coordination Team enrolled/ “touched”: **300 patients**. Staff touchpoints included, but were not necessarily limited to:

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| --- | --- |
| **Touchpoint Type** | **Count** |
| Bedside Visit | 181 |
| Home Visits | 223 |
| Office Visits/ Appointment Accompaniment | 216 |
| Phone Calls | 2649 |
| Provision of Transportation Assistance | 220 |

*Please note that we prioritize these touchpoint types because well-research models (i.e. the Camden Coalition) have identified them as high impact activities – especially home visits and appointment accompaniment.*

In addition to capturing the intensity of services rendered to high risk patients, our internal dashboard also allows us to review trends in reasons for referral to our program. We have found that the top 4 reasons for referral to date (in order of priority) are: Diabetes, Poly-pharmacy, Untreated HTN, and CHF. However we would also note that many of our patients tend to have multiple comorbidities. Consequently, the reason for referral tends to be the comorbidity type that is more pronounced, unmanaged, and/ or acute at the time of referral. Tracking these types of disease-state and needs/ based trends enable us to deploy care coordination resources appropriately and to also identify potential training and educational needs for staff.

Similarly, Carroll utilizes an internal data system currently housed in Paragon to support its analytical processes, compilation of metrics, and impact analysis. Please note that Carroll is in the process of migrating to Cerner. This migration will assist in capturing standardized metrics across the enterprise.

# Return on Investment

The methodology for calculation of return on investment for care coordination programs is debated widely within the healthcare industry. A multitude of healthcare systems – ours included – have relied on tactics such as leveraging CRISP data for pre- and post-cost and outcomes comparisons. However, while pre- and post-utilization can be a helpful method of evaluation it is not necessarily a complete approach – especially given the multitude of programs that may be interacting with high-risk patients and with the varied industry metrics and benchmarks to which healthcare systems must adhere. There is a need to define *enrollment* in service. Patients may be positively affected by a single contact or “touch” by a program without receipt of intensive care coordination services. Given the aforementioned challenges, we utilize a series of strategies to evaluate return on investment:

* Pre and post CRISP data with attention to:
  + Prevention of Hospital Readmissions
  + Reduction of ED Encounters and Utilization
  + Quantifying Potential Avoidable Utilization
* Patient Experience
* Provider Experience

One persistent challenge with evaluation of outcomes is that it is contingent upon leveraging element of our Cerner-based electronic health record in its current status. We are hopeful that with the implementation of HealtheCare that it will improve staff workflow thereby improving outcomes that can be pulled from patient records and encounters.

Lastly, we would like to report that over the past fiscal year, we completed research on the subject of Care Coordination and ROI in conjunction with a team of MHA students from Johns Hopkins. This collective team drafted a white paper due to be submitted for publication and presented a national webinar on this subject matter because of the ongoing importance for industry stakeholder to convene around this subject matter with the goal of creating industry standards for impact evaluation.

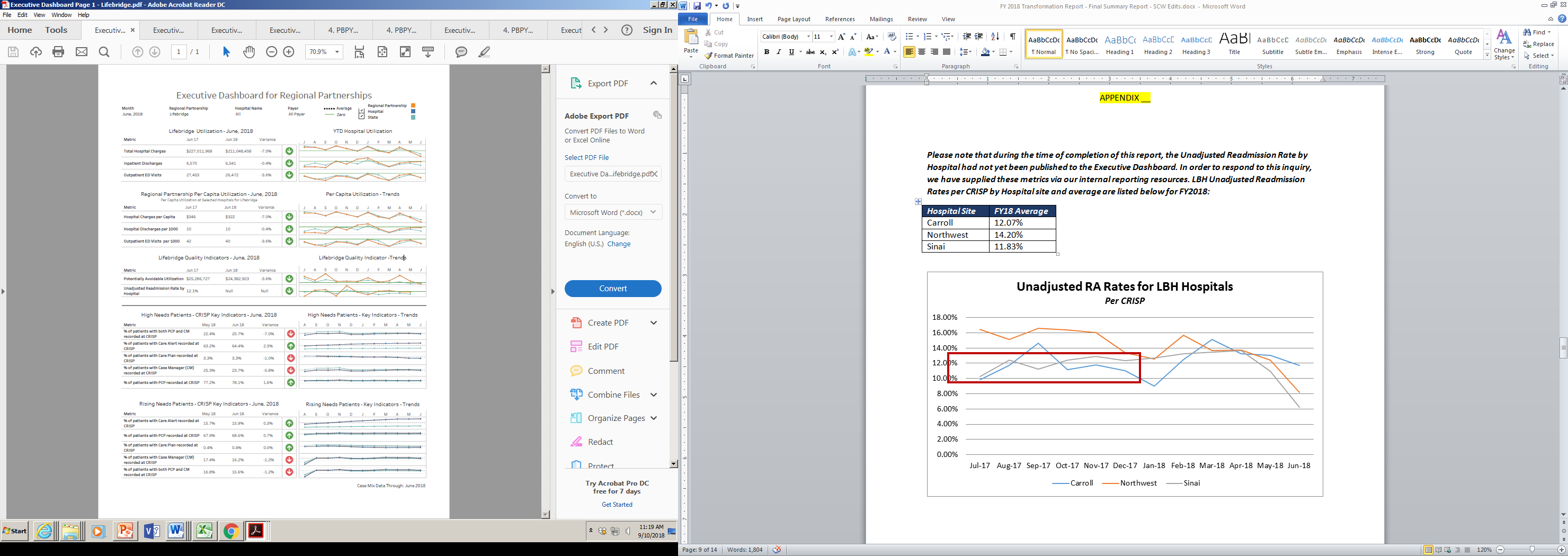
# Conclusion

Moving forward, we intend to continue to scale our program and work toward greater standardization of care coordination services across the LifeBridge enterprise. In the coming fiscal year, we intend to invest more dollars in the design and appointment of key FTE positions to support the growing operation infrastructure within the program. This will include the hiring of a Care Coordination Manager whose role will be to further manage day-to-day operations of the clinical staff and to promote further program growth. While we have made progress in connecting with high-risk patients, we want to continue to grow the volume of patients served both in inpatient and ambulatory settings. We envision further integration especially with primary care programs to capture both high-risk and rising risk patients. We will align this work with our overarching division goals of reducing readmissions, increasing quality outcomes, reduction of PAUs, and reducing the total cost of care.

As mentioned in our report, we will continue to leverage emergent technology via our forthcoming HealtheCare platform to drive provision of quality care to our high-risk populations. We are hopeful that the clinical pathways that are embedded within this program will encourage the improvement of care coordination activities between our staff and our physicians. Additionally this program will enable enhanced care surveillance and proactive identification of high-risk populations.

Furthermore, we have identified the need for the provision of ongoing staff education across disciplines to include care coordination, care management, ancillary services, providers, and allied healthcare practitioners to support these overarching goals. We recognize that care coordination is an emergent field that must be supported by the continued integration of empirically-based best practices. Lastly, we intend to appoint an operations manager within our population health program (not funded through the Transformation Grant) to support the continued evaluation of return on investment for all of our community-based and care coordination programs to ensure that we serve as effective stewards of these critical resources for our patients. In summary, the acquisition of this grant has absolutely assisted our healthcare system with generating the momentum needed to support the clinical transformation of our system.

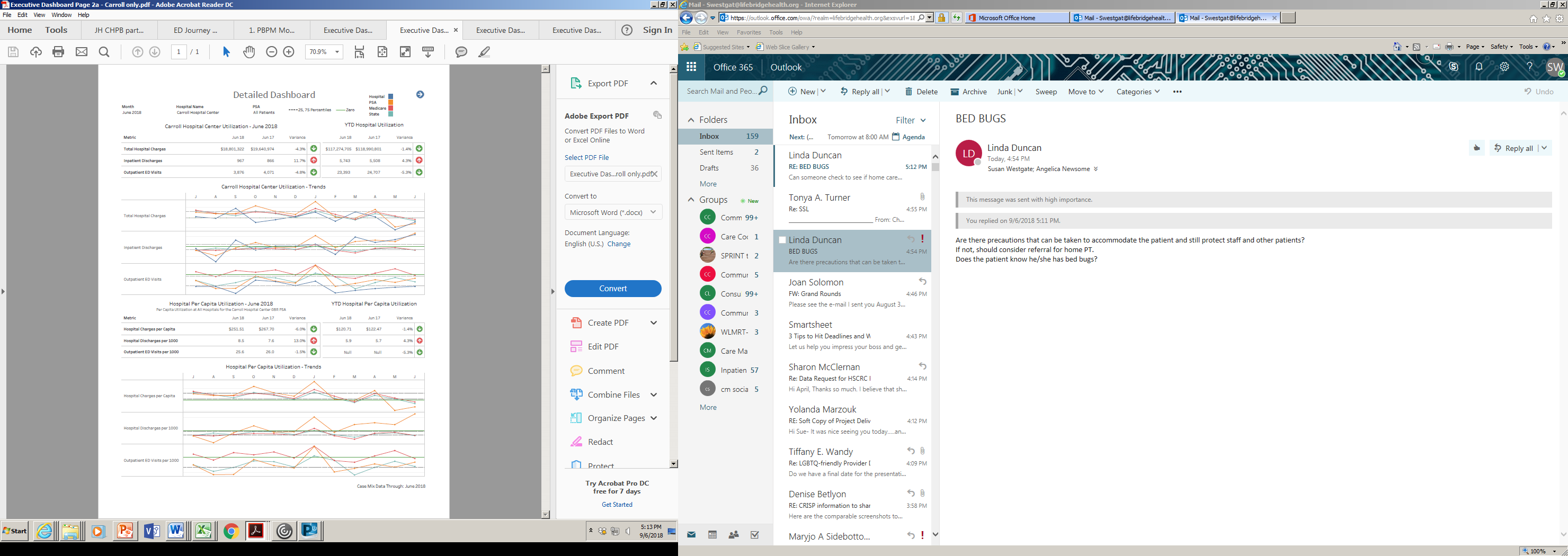
**APPENDIX 1: Executive Dashboard for Regional Partnerships - LifeBridge**



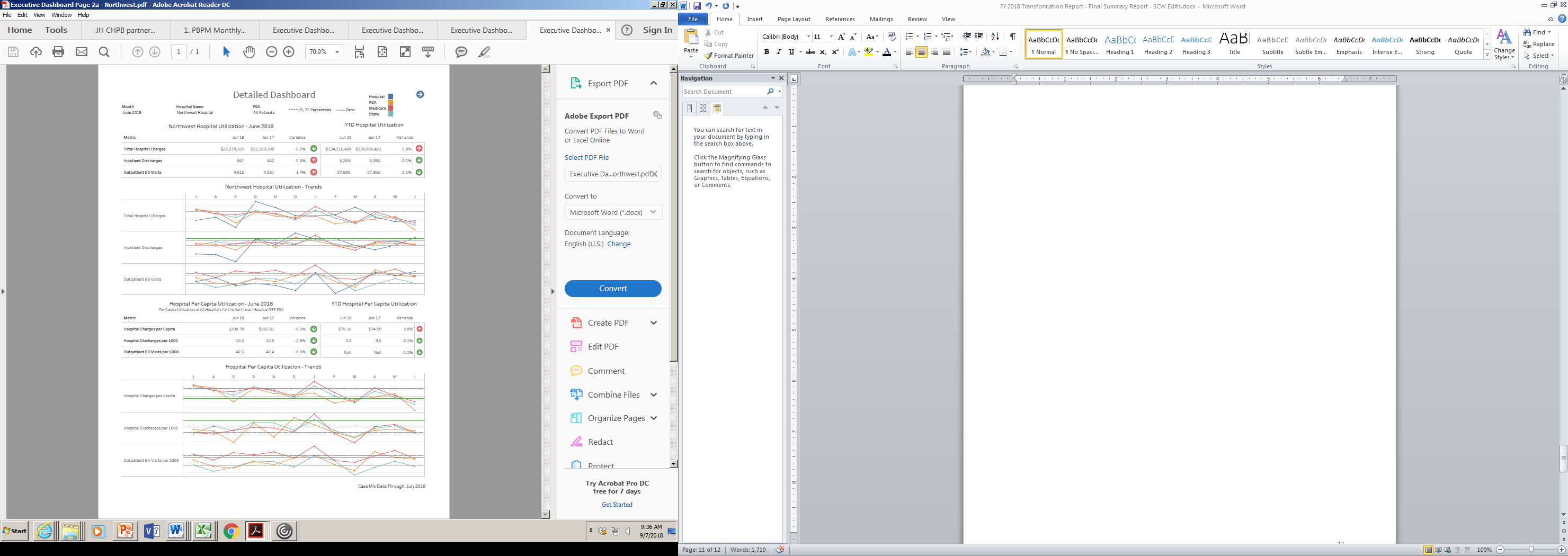
***Please note that during the time of completion of this report, the Unadjusted Readmission Rate by Hospital had not yet been published to the Executive Dashboard. In order to respond to this inquiry, we have supplied these metrics via our internal reporting resources. LBH Unadjusted Readmission Rates per CRISP by Hospital site and average are listed below for FY2018:***

|  |  |
| --- | --- |
| ***Hospital Site*** | ***FY18 Average*** |
| Carroll | | 12.07% |
| Northwest | | 14.20% |
| Sinai | | 11.83% |

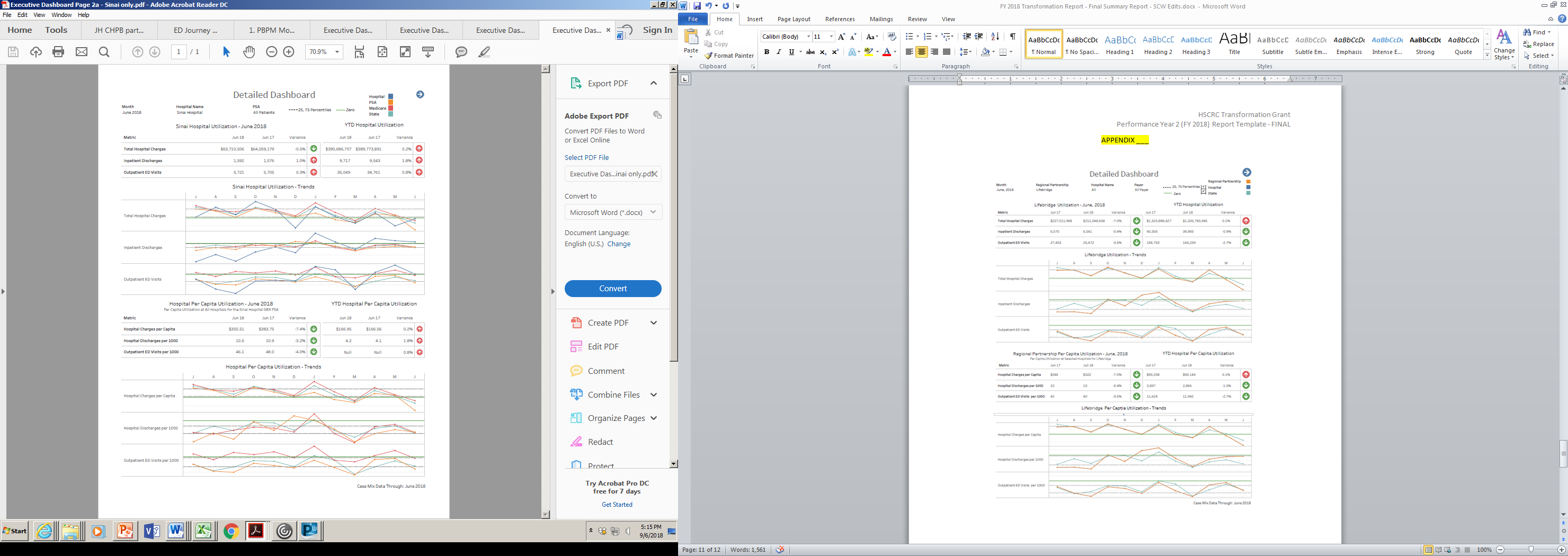
**APPENDIX 2: Detailed Dashboard – Carroll Hospital Center**



**APPENDIX 3: Detailed Dashboard – Northwest Hospital**



**APPENDIX 4: Detailed Dashboard – Sinai Hospital**



**APPENDIX 5: Per Beneficiary Costs Year to Date: All Service Types**

