





Unlocking Performance Value in Care at Home: Strategic Use of Analytics

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Learner Objectives

After attending this session, the learner will be able to:

- Describe current value-based initiatives in home-based care, and their impact on clinical care delivery
- Discuss how to leverage the payer perspective on contracting and value-based outcome performance
- Explain how strategic use of predictive and performance analytics can improve high value outcomes

Paint the landscape of healthcare at home



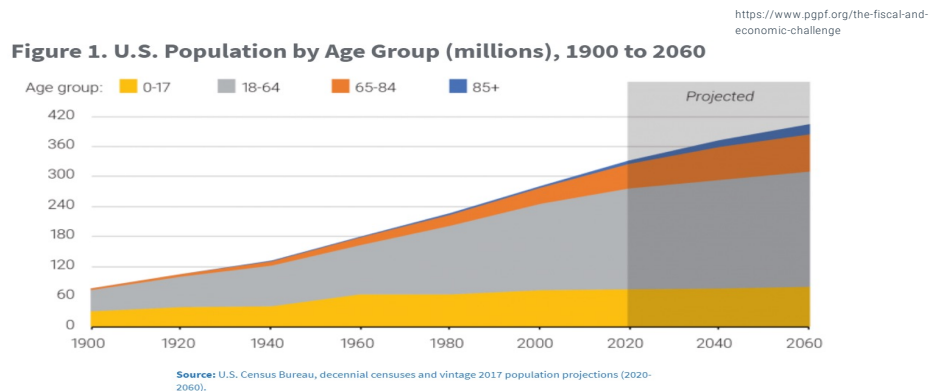
PwC: The five forces shaping the U.S. \$5 trillion

1. **Rise of consumerism** (Consumer access and ownership of health data; consumer cost-sharing; price transparency and shopping)
2. **Technology advances and digitization** (Use of electronic medical records and other health data; 3D printing; emergence of blockchain technology; spread of machine learning and artificial intelligence)
3. **Decentralization** (Spread of virtual care and remote patient monitoring; embrace of alternate venues and resources for care; increased use of extenders; seamless sharing of data among stakeholders)
4. **Surge in interest in wellness** (Consumer interest in wellness; insurer incentives for wellness; employer interest in wellness)
5. **Shift from volume to value** (Federal drive toward value-based purchasing; insurer push for value-based contracts; pharmaceutical and life sciences company push toward value-based contracts)

<https://www.healthcareitnews.com/news/top-5-forces-shaping-future-healthcare>

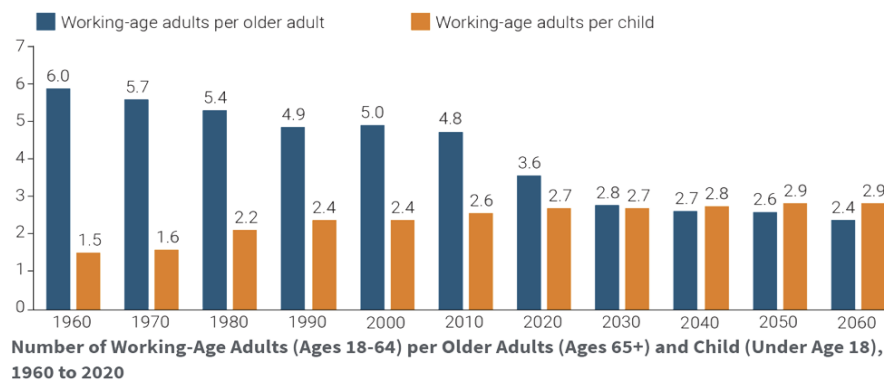
Demography driving demand

- Growth 65+ population, adding ~36 M in next ten years, straining care resources
- 65% have at least two chronic conditions
- Chronic conditions increase medical complexity, 2-3X costs



Supply side shrink

Figure 4. The Number of Working-Age Adults per Older Adult Has Fallen Dramatically



Note: The old-age support ratio is the number of adults ages 18 to 24 per adult age 65 or older. The support ratio for children is the number of adults ages 18 to 24 per child under age 18.

2022 U.S. projected to be one million+ nurses short

<https://www.pgpf.org/the-fiscal-and-economic-challenge>

And then came COVID-19

Public Health Emergency accelerated shift to advancing levels of healthcare at home

Clinical operations innovating – *we had to*

Staffing challenges exacerbated

Machine learning and virtual care rising:

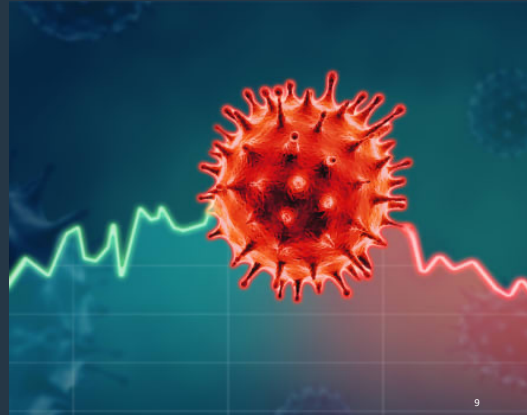
virtual visits, RPM, telecom

Disparity of healthcare access notable – driving need to measure and respond to

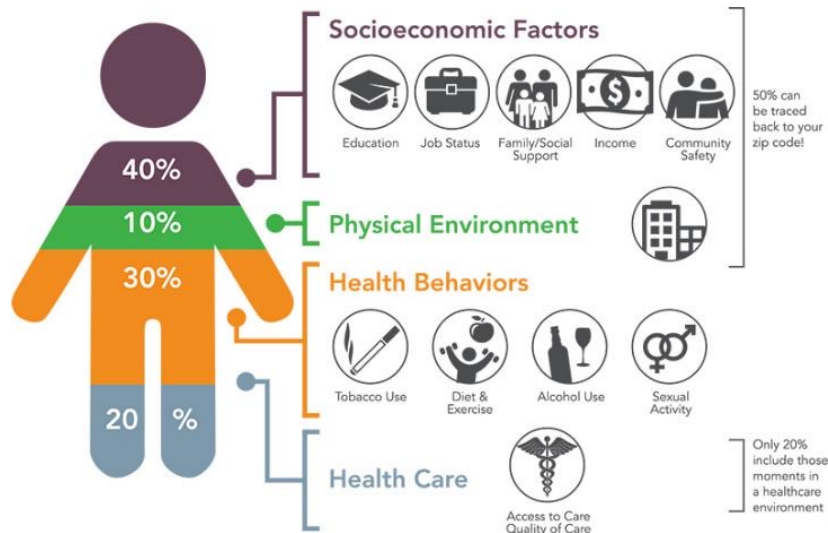
Social Determinants of Health (SDoH)

Public Health Emergency exposed:

- The logic of care at home
- The importance of SDoH and inequity of access
- The need for innovation



Social Determinants of Health (SDoH)

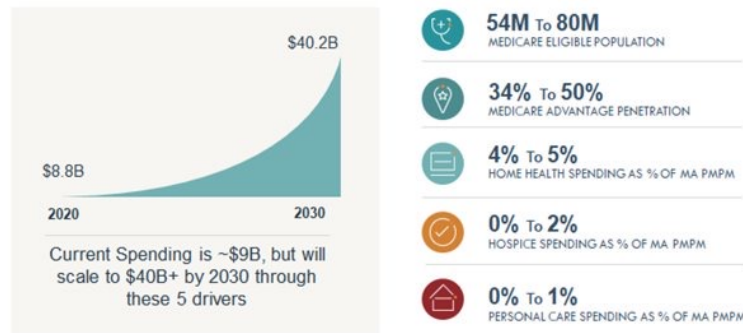


Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

Higher acuity patients discharged home in 2020, when compared with 2019

- **7% increase in Van Walraven Comorbidity score**
 - 2019 average = 9.8 vs. 2020 average = 10.6
 - This translates to significant increase in mortality risk
 - Average mortality of patient w/score of 9 = 1.7%
 - Average mortality of patient w/score of 10 = 2.2%
- 8% increase in dementia
- 9% increase in hospital ALOS prior to discharge
- 21% increase in respiratory failure
- 17% increase in kidney failure
- 4% increase in stroke
- Source: CarePort

Medicare Advantage – expanding into a growth market



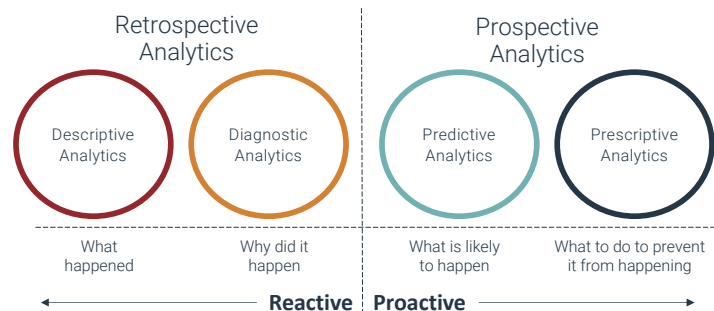
TEN YEAR PROJECTION OF MA EXPANSION INTO HEALTHCARE AT HOME

- What data do you need to prepare for them?
- *What data is available to them, today, about you?*

Care at home innovation – tools to build value within changing landscape



Traditional view of analytics capabilities



Care at home analytics reaching full spectrum of clinical care optimization, relationship management, & caregiver engagement analytics

Why is meaningful data important?



The industry continues to change payment models

- 35% of Medicare recipients and 65% of Medicaid recipients are now being managed by private insurers in capitated risk models
- 90% of all FFS Medicare payments are tied to outcomes through programs like value-based purchasing and bundled payments



There isn't enough time in the day

- Compressed staffing and high task orientation and productivity expectations straining resources



Focus on your highest risk patients

- In value-based care, your outcomes will be your biggest competitive advantage. Focusing on your highest risk patients will allow you to improve your clinical results across the board!



Utilize performance data to grow your census

- "Data is the new donuts". Sales and marketing teams can now leverage top clinical outcomes to create personalized, powerful, data-driven marketing materials

Care at home continuum, by sector:

- Context
- Aligned analytics
- Strategic application

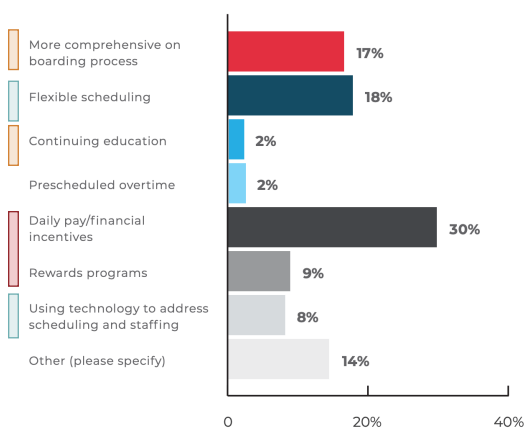
Workforce and analytics



EMPOWER THE PEOPLE DOING THE WORK

Several Key Opportunities To Improve Caregiver Retention

Financial incentives, training, and scheduling



"What retention investments are you considering making this year?"
Home Healthcare News Survey, 2021

Gamified Financial Incentives & Rewards

Create targeted short and long-term performance goals that will result in recognition and financial rewards, driving employee satisfaction.

Caregiver Engagement- Onboarding & Training

Bridge the onboarding gap by offering customized engagement and training plans, supporting long-term educational goals and skill up-leveling.

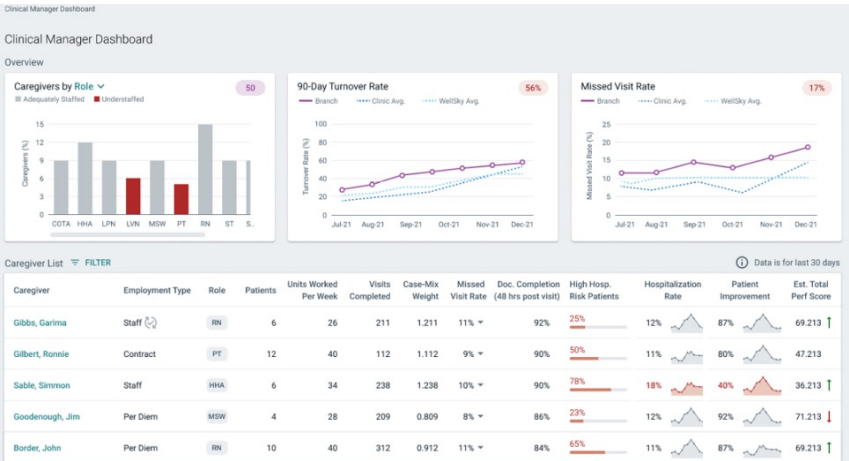
Caregiver-Friendly Scheduling

Create customized schedules that offer caregiver flexibility, reduce drive-time and ensure good patient-provider skill matching.

FUTURE: Predictive Turnover Intervention

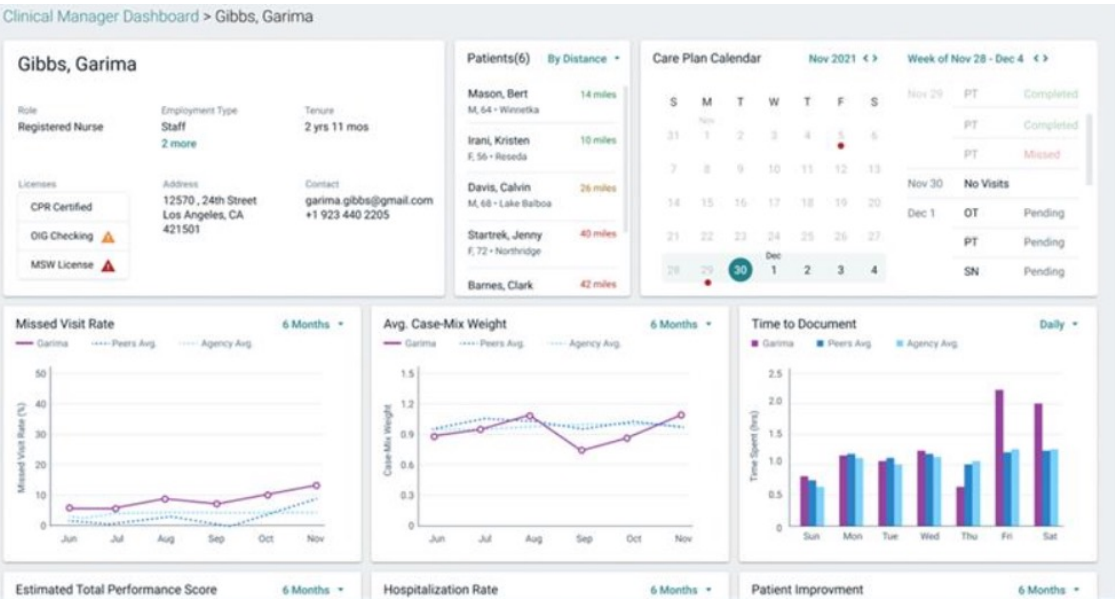
Utilize performance and engagement data to identify high churn-risk individuals and preemptively intervene in a caregiver-specific way.

Workforce patterns alert leaders to where to place their efforts:
Align training, focus and support



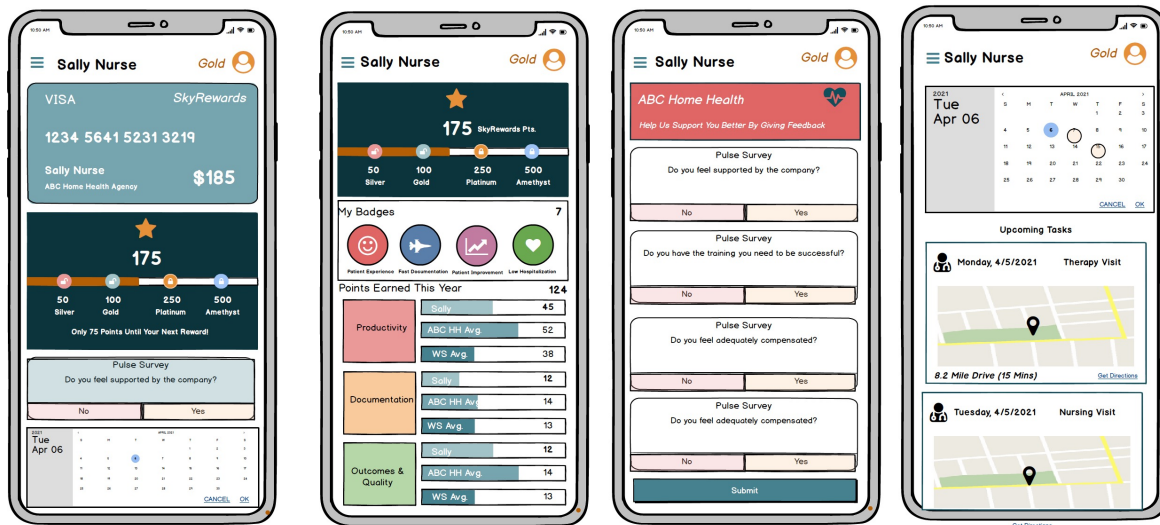
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Supervisory attention to need reduces turnover



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Mobile apps for clinicians/caregivers Staff engagement & performance rewards to drive satisfaction



Successful leadership integrates analytics into situational leadership theory

- Situational/functional management theory – provides common platform, three premises:
 1. There is not one, but several supervisory approaches good managers can use when supervising and motivating employees
 2. All employees are not the same - different employees function at different levels of skill and motivation
 3. Optimal supervision can be most effectively achieved by adjusting the supervisory approach to the functional level of each employee, for example:
 - a. If functional level/ability is low, and/or motivation is low – high direction is needed, relative to personal development time
 - b. If functional level/ability is high, and motivation is high – low direction is needed, high personal development and growth are needed
- Workforce analytics make applying effective, data-driven leadership easier

(Source: WellSky Supervision Plus®)

Personal Care

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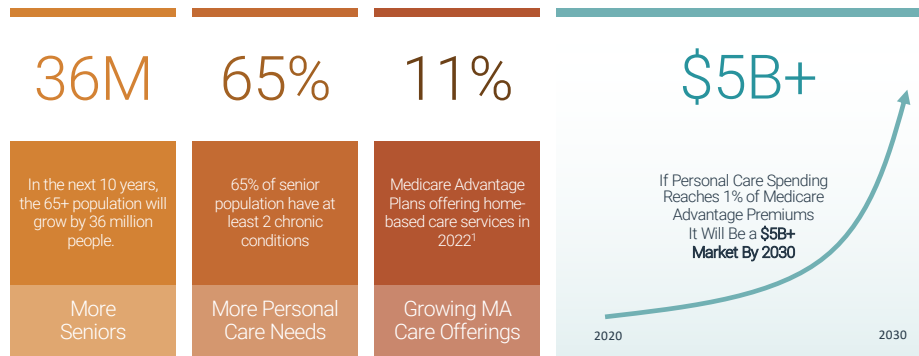
Personal Care

Context, Aligned Analytics, Strategy



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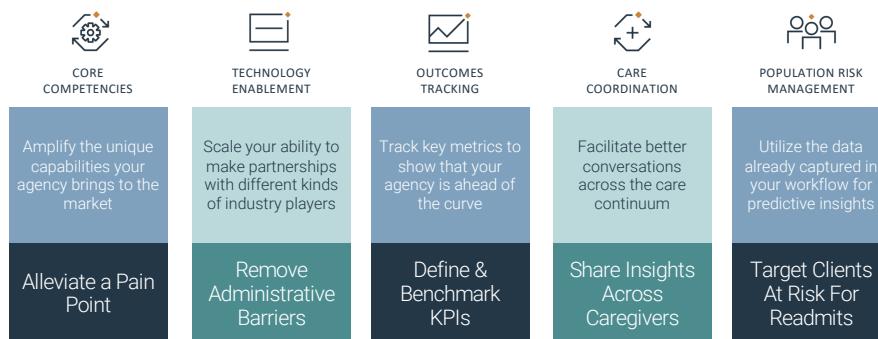
MA approach to personal care market – CHANGE



1. Avalere Health: <https://avalere.com/insights/more-medicare-advantage-plans-will-offer-non-medical-benefits-in-2022>

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This market will require new capabilities from personal care providers



Care beyond the clinic

Murphy, Kyle, November 2019:

"Providers and payers have come to the realization that effecting system change requires a more comprehensive understanding of the patient beyond the clinical encounter."

Social determinants of health play a significant role in whether a patient is able or willing to adopt behaviors likeliest to improve his health status.

"Health actually begins where we live, learn, work, play, pray," Parkland Center for Clinical Innovation President & CEO Steve Miff, PhD"

<https://healthpayerintelligence.com/news/humana-calls-for-social-determinants-of-health-in-risk-adjustment>

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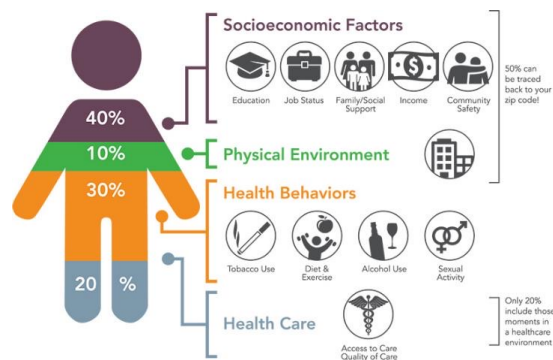
Social Determinants of Health

"The social determinants of health are the **conditions in which people are born, grow, live, work and age**.

These circumstances are shaped by the distribution of money, power and resources at global, national and local levels.

The social determinants of health are **mostly responsible for health inequities** - the unfair and avoidable differences in health status seen within and between countries."

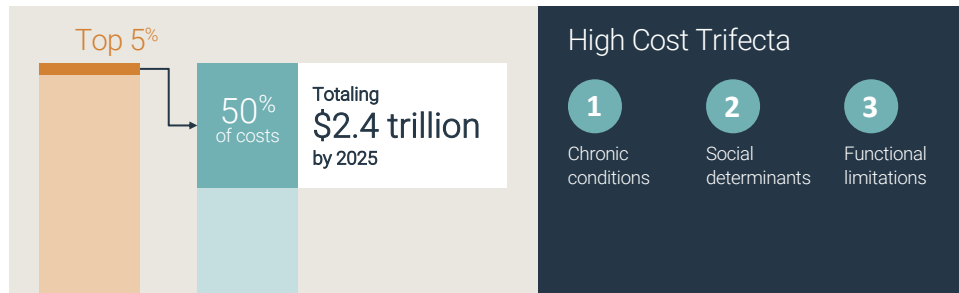
http://www.who.int/social_determinants/sdh_definition/en/



Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2016)

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Top 5% of patients driving 50% of healthcare costs



Sources: Pew Research Center, Census.gov, CDC, Department of Health and Human Services

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What are we talking about when we say Social Determinants or Functional Limitations?

High Needs: People who have 3+ chronic diseases and a social determinant or functional limitation that limits their ability to self-care



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Why analytics for personal care?



Leverage Your Care Data

Intelligent care optimization and decision support can help improve client outcomes and increase client and family satisfaction.



See into Client Risk

Evaluate your patient population to gain a comprehensive view of key factors that inform quality care: hospitalization risk, social determinants of health, and visit utilization.

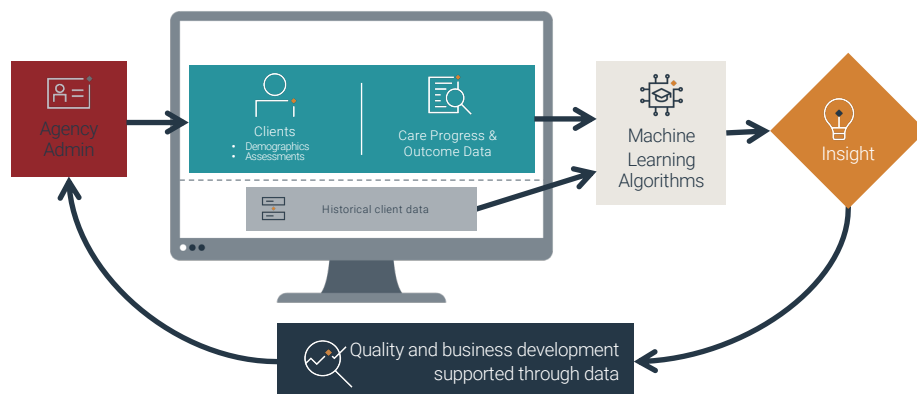


Outcomes Analytics & Benchmarks

Track and report on key value-based outcome metrics for your client population, using the data to market your success to payers & key referral sources and driving long-term growth.

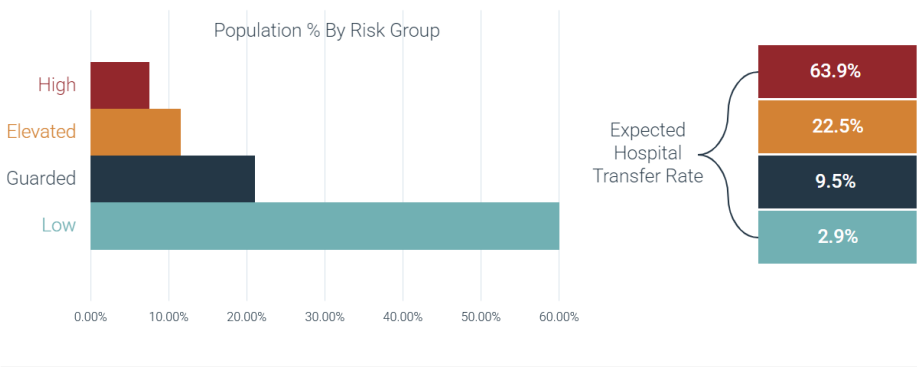
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How does it work?



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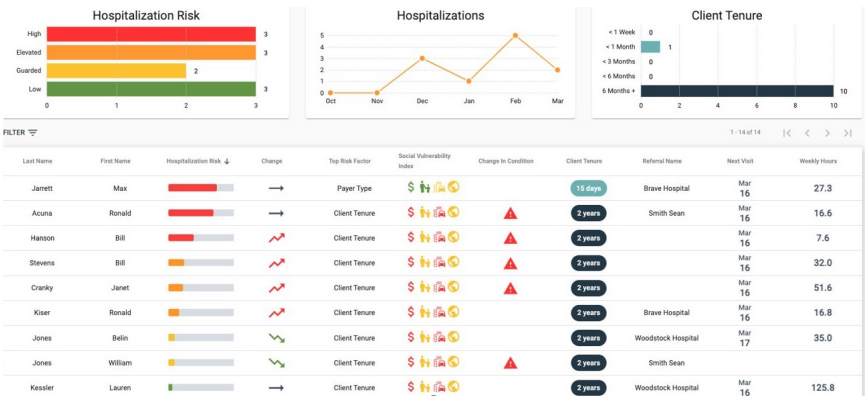
Take advantage of algorithms that predict risk



Identify patients at risk of hospitalization based on a predictive algorithm. Patients are segmented into categories based on the estimated likelihood for hospitalization rate

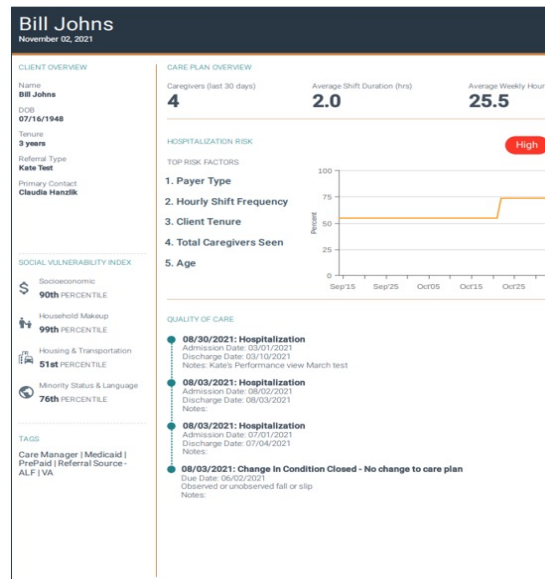
Evaluate the population you serve and risk they hold

Use to know your market and gain leverage



Drill down to client

- Provides understanding of client condition and elements informing quality of care
- Share this data with providers, referral sources, family members, and other care team members to facilitate effective communication



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Real-time Performance data

Benchmark Key Performance Indicators

Metric	Your Result	Trend	Target	Medicare Avg	Medicare Advantage Avg	Overall Avg
Hospitalizations	12.4%		Not Set	15.6%	14.9%	15.1%
30-day All Cause Rehospitalization	7.3%		Not Set	12.8%	13.1%	12.9%
Falls	6.1%		Not Set	6.2%	6.5%	6.3%
Active Clients	60		Not Set	N/A	N/A	N/A

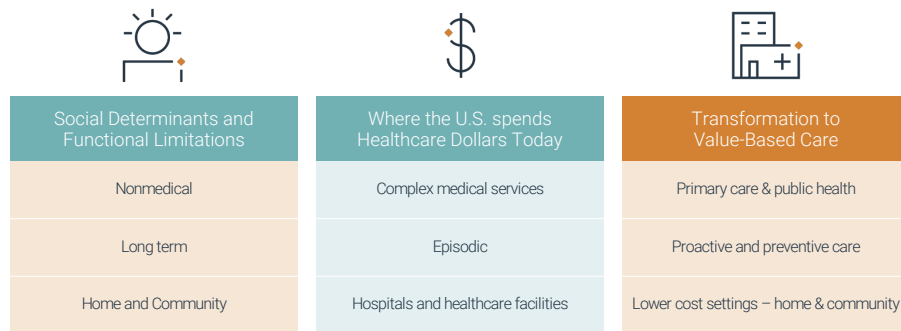
Slice and Dice Data

Reporting Period	Capability to adjust time range best suited for each data study
Referral Name	Uses the list of referrals that you have captured within your agency
Referral Type	See how your clients from specific types of referrals fare
Location	Compare one location with another
Hospitalization Risk	Capability to compare and refine based on hospitalization risk at start of care

Present your agency as a solution and succeed

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Personal care providers provide high value: Lowering health care costs and improving outcomes



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Positioning is key

SDoH integration

With care at home market partners

- Hospice and Home Health increasingly adopts integration of SDoH into clinical risk assessment, gathering data to drive more effective care planning

Plan

- Show how your SDoH data, integrated into overall assessment yields picture of risk and associated intervention planning

Build

- Build strategic relationships with community-based providers to assist in resource-alignment with identified need

Track

- Track outcome achievement: ACH, emergent care, satisfaction, cost

Leverage

- Leverage value-add in community to key referral sources, HH and Hospice, ACO's, health systems, payers, market

What can you do with analytics in personal care?

Work more efficiently, learn where you want to improve and sell good results

Care Coordinator



Focus on highest risk clients

- Keep an eye on all your clients
- Identify clients who are most at risk, prioritize care management efforts, and ultimately prevent avoidable hospitalizations and readmissions.
- Make more informed recommendations for changes to clients' care plans and schedules

Marketing & Sales Team



Use performance data to grow your business

Sales and marketing teams are bringing highly targeted data to show how well your agency does with a specific referral source

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Home Health

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Home health

Context, Aligned Analytics, Strategy

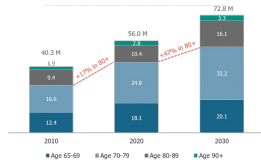


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Our industry faces a historic inflection point

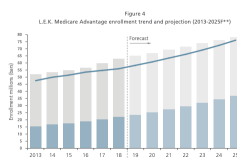

Increasing Needs, Limited Staff

80+ Population Projected 47%+ Growth in in The Next 10 Years



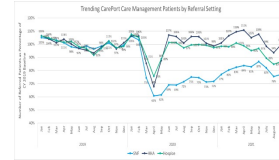

Shift In Payer Mix

"Medicare Advantage Heading Towards 70% Penetration" -LEK




Rise of Home-Based Care

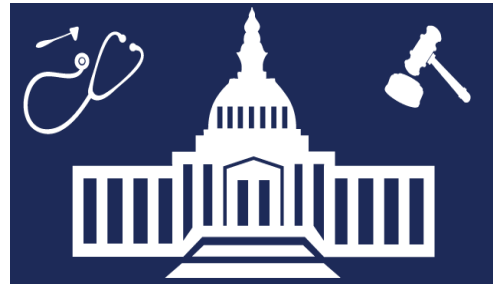
Covid accelerated Care At Home



Federal regulation and payment goals aligned Lose waste, drive higher value

- 2018 HHCOPs focus: patient-centered and outcome-oriented care planning.
 - Expansion of patient rights
 - Requirement: QAPI Program
 - Requirement: Plan care to reduce risks such as hospitalization, emergent care, infections (high risk, problem prone areas)
- 2023 national expansion of Value Based Purchasing, as demo proved big cost savings through reducing hospitalization
- 2023 Proposed Rule for HH – reimbursement squeeze, high potential for \$\$\$ takebacks under PDGM

PUT THESE PIECES TOGETHER



Certified Home Health Value Based Purchasing

- Competition!
- Bonus v. Penalty
- Market positioning key
- Performance compels you to know which metrics comprise the TPS...and then, learn how to move your metrics
 - ✓ Nationwide HHVBP, small and large cohorts
 - ✓ 1st performance year -2023
 - ✓ 1st payment year -2025
 - ✓ Payment increase or decrease up to 5%
 - ✓ Quality achieved or improved from baseline year 2022* (proposed)

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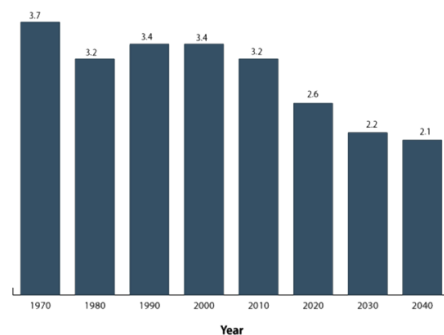
The new productivity

Achieve the optimal, realistic outcome within the most efficient use of resources



Supply side shrink

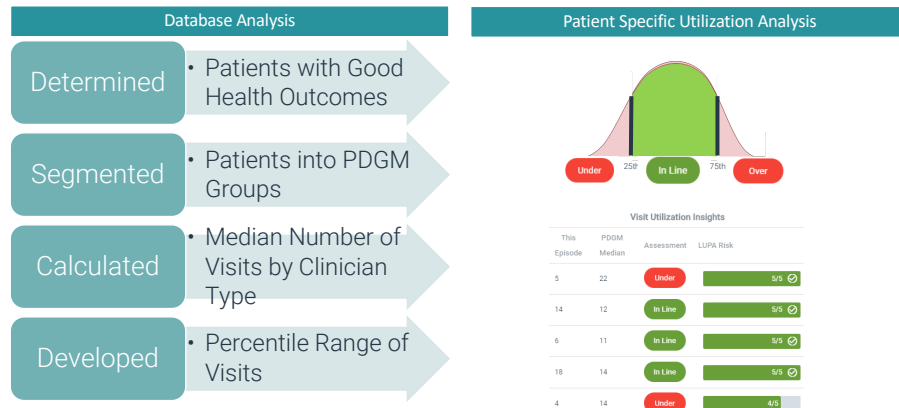
Number of Workers Per Social Security Beneficiary, 1970-2040



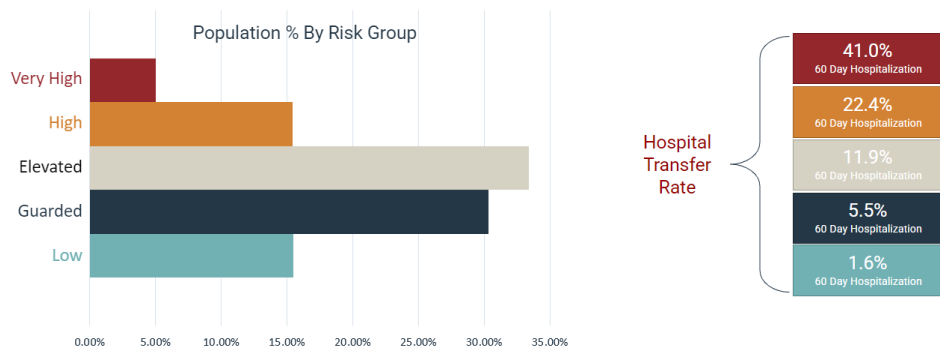
Reality-check:

- Managing growth in demand is tough when supply is short
- We cannot afford to waste a visit
- Each visit should contribute toward low rehospitalization and high satisfaction
- Effective capacity management is needed through data and risk-informed, intelligent care management
- Ask yourself, how does your team plan care?

PDGM – leaders using data to focus resource use

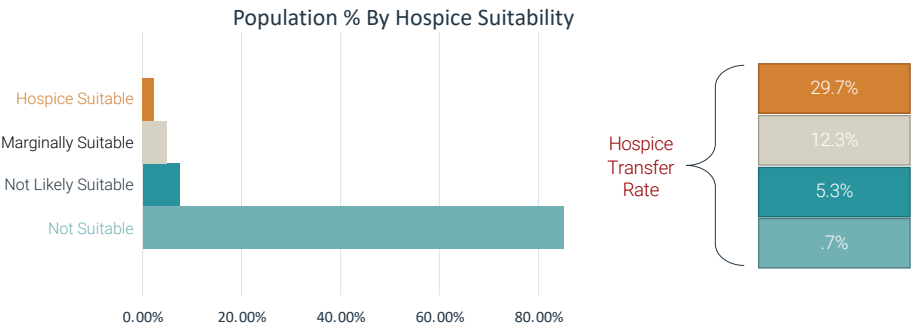


Risk of hospitalization – we all need to know!



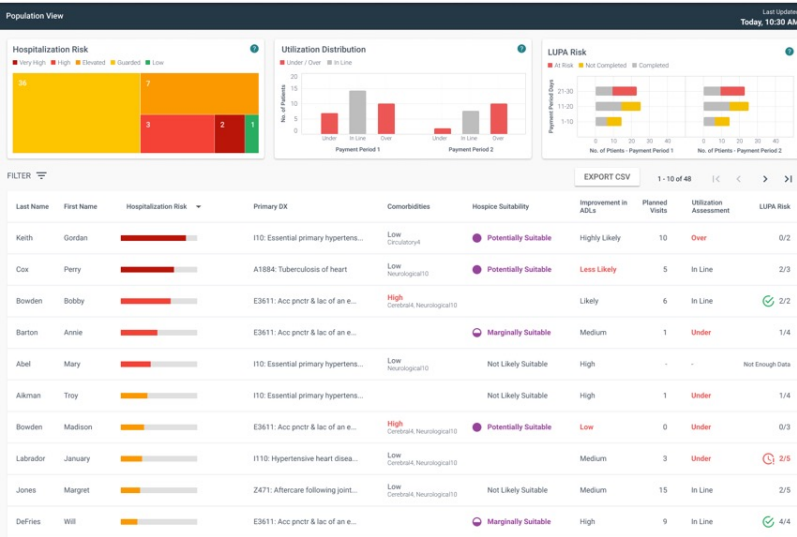
Machine learning can predict likelihood of hospitalization based on a predictive algorithm.

Predict likelihood of hospice suitability
Help your team to more effectively serve patients and families

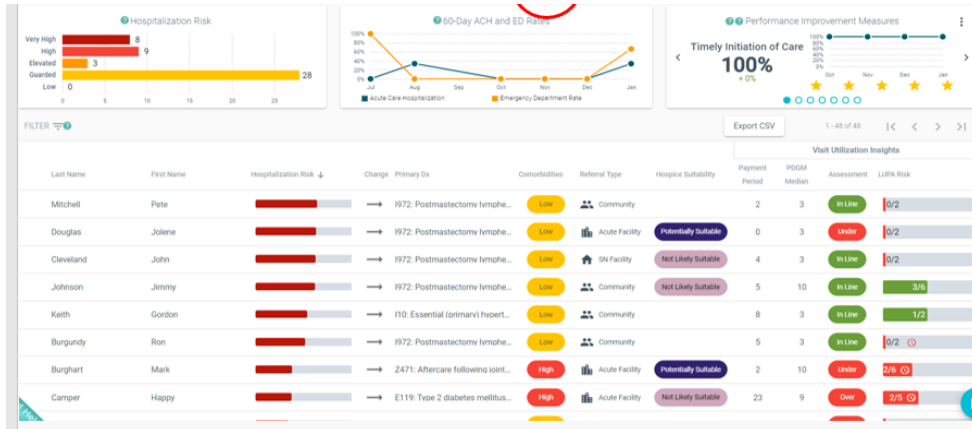


Algorithm identifies patients who may be suitable for hospice care based on a predictive algorithm. Patients are segmented into categories based on the estimated likelihood for hospice transfer rate.

View team/census risk

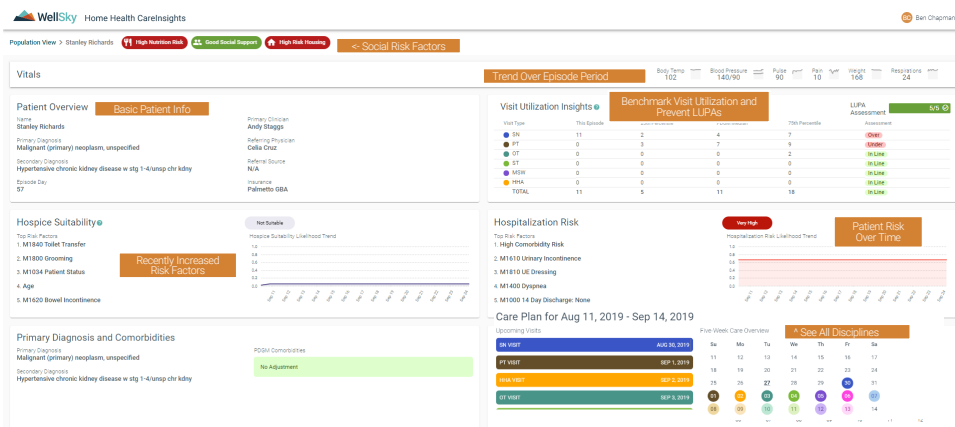


Lots of options to slice and dice data



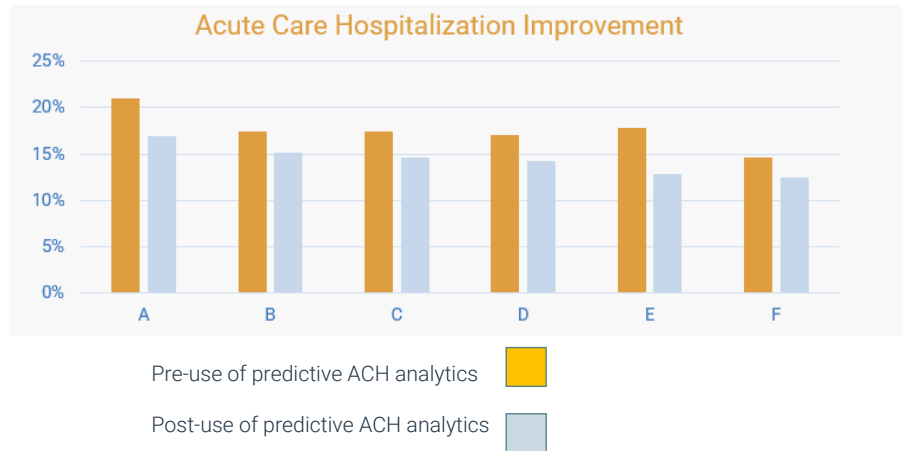
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Gain much deeper insight into patient's risk and plan impact



Success Stories

ACH goes down when awareness of risk goes up



QAPI fueled by real-time outcome data

	Measures	Current Value	Change Score	Target	Improvement Threshold (% Point)	Achievement Threshold (% Point)	Benchmark (% Point)	National Average
Efficiency	💰 ★ 👤 Timely Initiation of Care	99.1%	N/A	Not Set	N/A	N/A	N/A	97.2% (+ 1.9)
	💰 ★ 👤 Median Number of Visits	13	N/A	Not Set	N/A	N/A	N/A	13
Patient Improvement	💰 ★ 👤 Total Normalized Composite Change in Self-Care (Risk-adjusted)	2.102	N/A	Not Set	1.851 (+ 0.3)	1.683 (+ 0.4)	2.344 (- 0.2) ●	1.827 (+ 0.3)
	💰 ★ 👤 Improvement in Bathing (Risk-adjusted)	88.7%	0.268	Not Set	N/A	N/A	N/A	73.8% (+ 15.0)
	💰 ★ 👤 Improvement in Upper Body Dressing (Risk-adjusted)	87.1%	0.411	Not Set	N/A	N/A	N/A	76.5% (+ 10.6)
	💰 ★ 👤 Improvement in Lower Body Dressing (Risk-adjusted)	87.3%	0.413	Not Set	N/A	N/A	N/A	73.1% (+ 14.2)
Preventing Hospitalizations	💰 ★ 👤 Acute Care Hospitalization During the First 60 Days of Home Health (Risk-adjusted)	13.4%	N/A	Not Set	15.1% (-1.7)	15.0% (-1.6)	8.3% (+ 5.1) ●	16.3% (- 2.9)
	💰 ★ 👤 Emergency Department Use Without Hospitalization During the First 60 Days of Home Health	2.1%	N/A	Not Set	15.9% (-13.8)	12.8% (-10.7)	5.6% (-3.5)	1.7% (+ 0.4) ●
	💰 ★ 👤 Rehospitalization During the First 30 Days of Home Health	15.4%	N/A	Not Set	N/A	N/A	N/A	15.0% (+ 0.3)
	💰 ★ 👤 Discharged to Community (Risk-adjusted)	76.6%	N/A	Not Set	87.9% (-11.3) ●	82.7% (-6.1) ●	94.0% (-17.4) ●	71.0% (+ 5.6)

Key Takeaways:

- Overall, I am better than the national average for hospitalizations
- I have a lot of work to do to educate patients and their families about using the Emergency Room

VBP Performance enabled by smart, real-time data

HHVBP – Total Performance Score

Fueling your QAPI with data

TN - Memphis

Medicare Certification: 05/23/2015

Cohort Size: Large

Quality Episodes: 327

Est. Total Perf. Score: 66.783

WS National: 69th

Est. Final % Payment Adjustment: +5%

Value-Based Purchasing Quality Measure	Agency Performance (Improvement Threshold 2019)	All Agency Median (Achievement Threshold 2019)	All Agency 95th Percentile (Benchmark 2019)	Current Value	Achievement Score (Compared to All Agencies, 0-10)	Improvement Score (Compared to Self, 0-9)	Performance Score (Highest, 0-10)	Performance Score WS National Percentile	Weight
TNC Self-Care	2.122	1.683	2.344	2.218	8.104	3.903	8.104	85th	8.8%
TNC Mobility	0.690	0.582	0.829	0.721	5.638	2.008	5.638	76th	8.8%
Improvement in Management of Oral Medications	89.3%	72.1%	92.8%	83.9%	5.694	0.000	5.694	75th	5.8%
Improvement in Dyspnea	88.3%	80.8%	95.9%	87.2%	4.212	0.000	4.212	60th	5.8%
Discharged to Community	89.2%	82.7%	94.0%	76.6%	0.000	0.000	0.000	0th	5.8%
60-Day Hospitalization	18.1%	15.0%	8.3%	16.2%	0.000	1.782	1.782	48th	26.3%
60-Day Emergency Department Use	12.7%	12.8%	5.6%	1.6%	0.328	3.146	3.146	36th	8.8%
HHCAHPS Professional Care	89.0%	86.0%	93.9%	89.0%	3.786	0.000	3.786	47th	6.0%
HHCAHPS Communication	89.0%	86.0%	93.9%	89.0%	3.786	0.000	3.786	63rd	6.0%
HHCAHPS Team Discussion	82.0%	84.0%	93.5%	82.0%	0.000	0.000	0.000	0th	6.0%
HHCAHPS Willingness to Recommend	85.0%	80.0%	92.4%	85.0%	4.028	0.000	4.028	71st	6.0%
HHCAHPS Overall Rating	90.0%	85.0%	95.7%	90.0%	4.672	0.000	4.672	69th	6.0%

Quality of Patient Care Star Ratings – Fueling your QAPI with data

Quality of Patient Care CMS Star Rating

Per CMS, the official star rating requires at least 20 quality episodes. However, you have an option to run with fewer quality episodes here in order to see a real-time estimation of your star rating and proactively drive performance excellence.

Quality Episodes

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Estimated Star Rating

★ ★ ★

Measures	Current Value	Initial Decile Rating	National Median (% Point Difference)	Statistical Test Results (>0.05?)	Adjusted Rating
Timely Initiation of Care	99.4%	4.0	97.9 (+1.5)	Yes	4.0
Improvement in Bathing (Risk-adjusted)	-	-	66.4 (-2.9)	-	-
Improvement in Ambulation (Risk-adjusted)	84.1%	3.5	81.1 (+3.5)	No	3.5
Improvement in Bed Transferring (Risk-adjusted)	76.0%	1.5	82.7 (-6.7)	Yes	2.0
Improvement in Dyspnea (Risk-adjusted)	82.2%	2.5	83.2 (-1.0)	Yes	2.5
Improvement in Management of Oral Medications (Risk-adjusted)	97.9%	2.5	77.6 (+20.3)	Yes	2.5
Acute Care Hospitalization During the First 60 Days of Home Health (Risk-adjusted)	14.5%	3.0	15.0 (-0.5)	Yes	3.0

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Who on your team should use predictive analytics?

Clinical Manager

- Monitors the patients of multiple field clinicians
- Reviews the visit utilization frequency
- Analytics fuel case conference 2.0
- Updated data - analyzes information entered in the field
- Visualizes which patients have the greatest need

QAPI and Education

- Fueling data informed PIPs
- Monitoring best practice utilization patterns
- Informing case conference 2.0, focused education stacking skills and supporting clinician learning, with integrated tools/data to serve

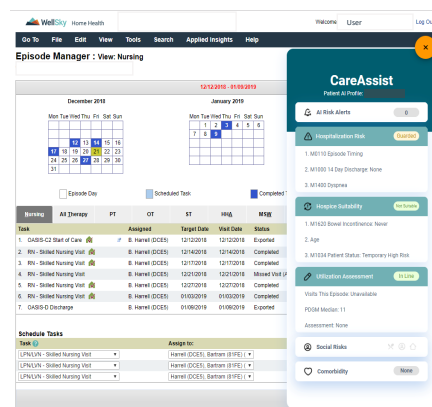


Who else should use predictive analytics?

The interdisciplinary team:

- Provides ongoing care to patients
- Inputs key clinical information into EMR
- Analytic engine provides an updated snapshot of a patient's risk factors

Take five in the drive!



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Case conference 2.0 supports operational and QAPI processes

Support QAPI and Performance Improvement Projects (PIPs) :

- reduce hospitalization
- improve satisfaction
- integrate data-driven guidance into new platform for dynamic education
- Improve utilization and capacity management – focusing care to need

Start with assessment approach/technique and data competence in OASIS capture

- Tie micro-education to real-time pattern of learning need
- Clinicians gain competence/confidence in assessment and point of care data capture
- Cycle of data informing risk-aligned and best practice thinking becomes a HABIT
- New habit serves patients more effectively

Patient acuity capture and data accuracy at SOC, End of Care matter

- VBP is measures of magnitude of improvement, 'dirty-data' can cloud outcome performance
- Data-gathering sets stage for analytic engines to inform risk and utilization profiles

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Give teams the tools to meet expectations

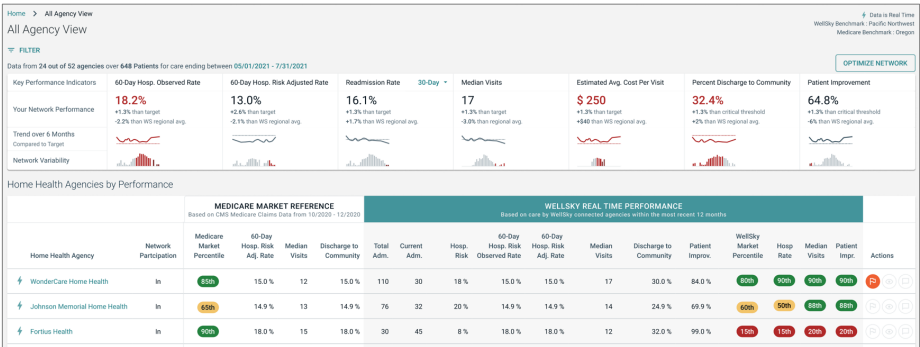
- *Train in expected use of available predictive analytics* – providing context for *why* and teaching of *how*
- *Integrate updated IDT process - Case conference 2.0 :*
 - daily virtual team triage and revised educational format for intelligent care management
 - every visit clinician view of data-informed risk snapshot
 - skill-stacking educational format , grand rounds approach, integrating best practice EMR and analytic use into clinician tools for care

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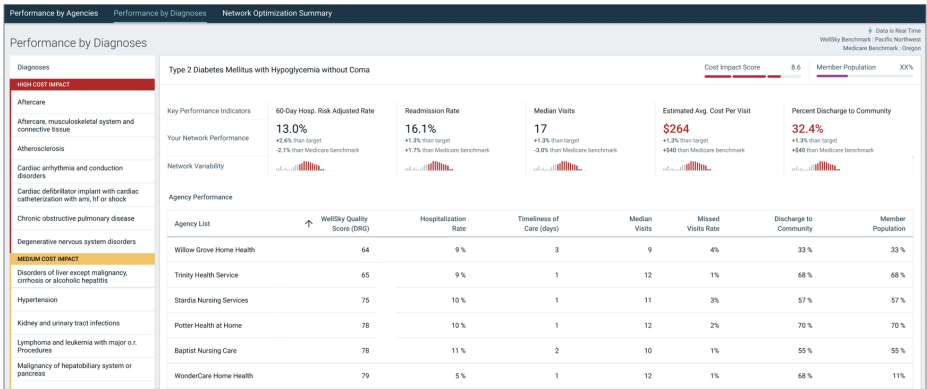
Payers – their view using analytics

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Payers care about agency performance



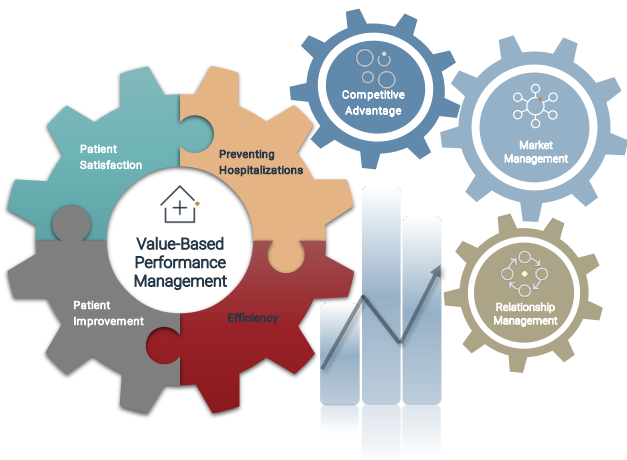
Payers focused on reducing variability in the Home Health setting



Analytics

Present your agency as a solution

Value-Based Performance Management
Centralized, scalable analytics to monitor all pertinent value-based quality measures, easily identify outliers, drive improvement and sustain excellent outcomes.

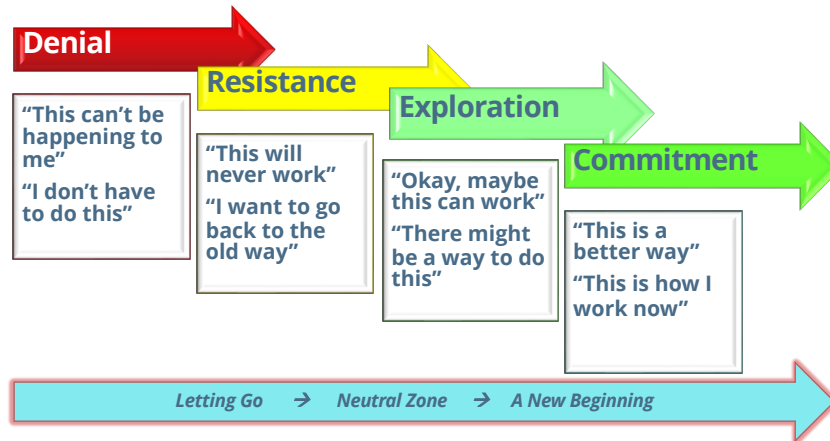


Competitive Position Management
Understand your performance position in your markets, CMS Star Ratings, HHVBP and other industry benchmarks.

Market Management
Alignment of leading payer and institutional market intelligence with agency performance to optimize opportunity and sales resources.

Relationship Management
Streamlined workflow designed to strengthen current referral source relationships and establish new ones by leveraging performance data and clinical strengths.

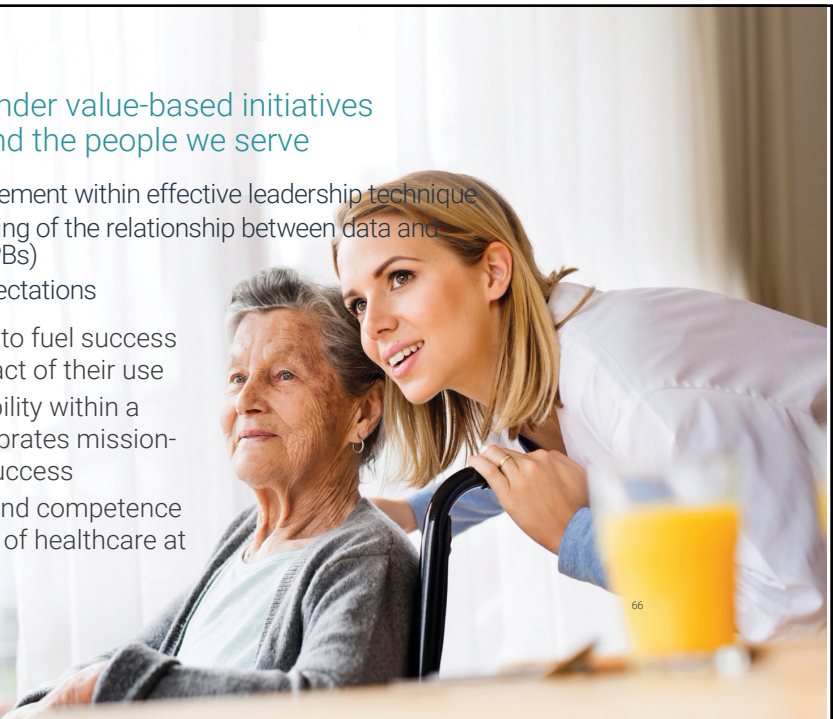
The reality of change management



Focus for success under value-based initiatives ...for the business, and the people we serve

- Data-fueled management within effective leadership technique
- Master understanding of the relationship between data and behaviors (KPIs/KPBs)
- Clarify specific expectations
- Provide with **tools** to fuel success and measure impact of their use
- Lead to accountability within a culture which celebrates mission-aligned practice success
- Build confidence and competence in today's practice of healthcare at home

Everyone wins



Questions/discussion

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