Sagility Health – Senior Business Intelligence Manager (Healthcare Analytics) Interview Preparation Guide for Kirankumar Thanduri --- Section A: BI & Data Visualization (Power BI Focus) **1. End-to-End Dashboard Development** - Data ingestion: Connect to SQL Server, Oracle, or flat files. - Data transformation: Power Query (M language) for cleaning, merging, and shaping data. - Data modeling: Build a Star Schema (Fact tables: Claims, Payments; Dimensions: Provider, Member, Time). - DAX Calculations: CALCULATE, FILTER, ALL, RELATED, SUMX, DIVIDE for KPIs. - Visualization: KPIs, drill-down charts, slicers, bookmarks, tooltips, and hierarchy navigation. - Deployment: Power BI Service publishing, Row-Level Security (RLS), and Gateway setup. **Sample Healthcare KPIs:** - Claims: Total Claims, Paid vs Denied %, Avg Processing Time. - Payment Integrity: Overpayment Recovered %, Recovery Rate, Potential vs Actual Savings. - Audit: Audit Success Rate, Provider-level Error Patterns. - Member/Provider: Claim Frequency per Provider, High-risk Provider Count. **2. Performance Optimization** - Query Folding: Push transformations to the data source. - DAX Optimization: Use variables, pre-aggregate data, and minimize context transitions. - Incremental Refresh: Refresh only new/changed data. - Aggregations: Pre-summarize high-volume historical data. - Composite Models: Combine Import + DirectQuery. **3. Role-Based Dashboarding** - CXO View: Strategic KPIs, trends, forecasts. - Operations View: Detailed tables, productivity, TAT tracking. - Apply RLS to ensure user-specific visibility. **4. Practical Prep:** - Revise Power Query, DAX functions. - Practice using a healthcare dataset (claims, payments, members). - Prepare one impactful dashboard story with metrics, DAX logic, and outcomes. --- Section B: Healthcare & Payment Integrity Domain **1. Claims Lifecycle:** 1. Submission → 2. Adjudication → 3. Payment → 4. Audit → 5. Recovery. - BI Use Case: Track claim status, denial trends, audit effectiveness, and recovery rates. **2. Payment Integrity Concepts:** - Overpayment Recovery: Identify excess paid claims for recovery. - Fraud/Waste/Abuse: Detect abnormal billing or duplicate claims. - Coordination of Benefits: Prevent double payment across insurers. - Pre-pay & Post-pay Reviews: Validate claims before or after payment. **3. Revenue Cycle Management (RCM):** - Covers the journey from patient registration to payment collection. - Key Metrics: Denial Rate, Clean Claim %, A/R Days, Net Collection Rate. **4. HIPAA & PHI (Critical for Healthcare Analytics):** - **PHI (Protected Health Information):** Any data that identifies an individual and relates to health status or care (name, SSN, date of birth, medical record number, etc.). - **HIPAA (Health Insurance Portability and Accountability Act):** U.S. law ensuring privacy and security of PHI. - Access Control: Restrict who can view PHI (use RLS, AD authentication). - Data Encryption: Encrypt PHI in storage and transit. - Masking: Hide sensitive identifiers in dashboards. - Audit Trail: Track data access and refresh history. **Example Compliance Practice:** - Mask patient IDs in Power BI. - Use secured gateways and Azure AD authentication. - Disable export for dashboards with PHI data. --- Section C: Data Engineering & Integration **1. Multi-source Integration:** - SQL Server, Oracle, APIs, flat files, and Python scripts. - Create standardized SQL Views or Power BI Dataflows for consistency. **2. Data Cleaning & Wrangling:** - Deduplicate, handle nulls, correct mismatched provider IDs. - Apply data profiling to find outliers and anomalies. **3. Scalable Data Models:** - Star Schema: Central fact table (claims) with dimension tables (provider, member, time). - Use Aggregations, Incremental Refresh, and Dataflows for large-scale systems. **Example:** “I combined SQL, SharePoint, and Excel sources using Power Query, cleaning and modeling the data into a unified structure. This enabled faster reporting and a 60% reduction in manual effort.” --- Section D: Leadership & Project Delivery **1. Managing BI Teams:** - Define deliverables, assign roles (BI Developer, Analyst, QA). - Conduct daily stand-ups and code reviews. - Mentor juniors on Power BI best practices and quality standards. **2. Client Communication:** - Translate business needs into measurable KPIs. - Provide weekly dashboard demos and progress summaries. - Manage stakeholder expectations and resolve conflicts early. **3. Handling Ambiguity:** - Break unclear requests into measurable goals. - Build quick prototypes, gather feedback, refine final outputs. **4. Example Scenario:** “When a client asked for ‘payment efficiency metrics,’ I defined KPIs like payment TAT, claim accuracy %, and recovery per claim, creating a prototype dashboard to finalize metrics collaboratively.” --- Technical & Behavioral Interview Pointers **Technical Questions:** 1. How do you design a scalable BI architecture? → Layered architecture: Source → ETL → Semantic Model → Dashboard. 2. How do you handle PHI & HIPAA in Power BI? → Masking, RLS, encryption, secured gateways. 3. How do you identify anomalies in claims? → DAX logic + statistical thresholds + conditional formatting. 4. How do you integrate Python/R with Power BI? → Using “Run Python Script” or “R Visuals” for predictive scoring. **Behavioral Questions:** 1. Tell me about a time you converted raw data into insights. 2. How do

you manage onshore/offshore collaboration? 3. What steps do you take to ensure data accuracy? 4. How do you handle pushback from clients on analytics results? --- Quick Tips for Kiran: - Start with a confident 2-minute intro linking your 18 years of experience to BI, Data Analysis, and Leadership. - Use examples showing impact (time saved, accuracy improved, insights delivered). - Emphasize your Power BI, SQL, and Excel automation skills with healthcare context. - Prepare to discuss data governance and compliance awareness. - End with a forward-looking statement: “I’m eager to bring my experience to strengthen Sagility’s Payment Integrity analytics practice.”