Appendix D
Business Rules

As used in these Recommendations and Appendices, a business rule is anything that captures and implements business, policies and practices and can be used to: 1) enforce policy (e.g., program hierarchy, exception handling), 2) make a decision (e.g., eligibility determination, point in time verification), and/or 3) infer new data from existing data (e.g., persons with the same address live in the same household).[1]

Given this definition, business rules should:

- Adopt a *consumer-mediated approach* by supporting efficient and timely eligibility determination, renewal and enrollment for the programs and in the context preferred by the consumer;
- Support *consistent, technology-neutral expression* of rules along a *continuum of implementation* modalities (e.g., enhancing legacy systems to developing new systems)*;*
- Support the *augmentation* of current State systems;
- Support interfaces between State eligibility systems and other systems that may support consumer enrollment, such as those used by community-based organizations, providers, and portals;
- *Accelerate* States' ability to comply with Affordable Care Act requirements;
- *Support integration* across systems and across programs to support a seamless user experience by addressing program hierarchy and providing capacity for addition of other programs;
- Guide the adoption and utilization of federated *core data*;
- Where necessary and possible, "buffer" the impact of imperfect information and data whether from verification sources (e.g., automated and point-in-time) or others; and,
- Minimize *maintenance* and allow for *scalability.*

Consistent, Technology-Neutral Expression of Business Rules
Recommendation 3.1 applies to business rules used in multiple eligibility and enrollment contexts including:

- Screening a consumer for potential entitlements or benefits (e.g., determining which programs a consumer is eligible for, which are most likely to suit articulated needs, and why); and,
- Making an eligibility finding for a particular program (e.g., finding that a consumer is ineligible for SNAP benefits because the calculated income exceeds the threshold required for eligibility).

A key component of Recommendation 3.1 is that Federal agencies and States express their business rules in a consistent, technology-neutral standard. The clear and unambiguous

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[1] Definition taken in part from IBM: http://publib.boulder.ibm.com

expression of business rules, as well as the output of these business rules – the eligibility finding and justification – has enormous value for both developers and consumers. Clear and consistent expression will ease development of technology solutions and facilitate seamless interoperability between programs, as developers will be able to identify and understand the rules that should be coded into new and existing systems. In addition, compliance with Recommendation 3.1 would provide maximum transparency to the consumer by providing a foundation for clear, understandable eligibility determinations.

Recommendation 3.1 also recommends that Federal agencies and States express their rules outside transactional systems. The primary reason for this is to develop a consistent, reusable set of business logic that can be written once and applied broadly. In contrast, business rules which exist only as computer code are harder to understand, enforce, extract and modify. This recommendation provides optimal flexibility during the implementation phase, as Federal agencies and States will be able to choose amongst a number of implementation options for new and existing systems including:

- Hand coding business rules into existing legacy systems;
- Parameterized and consumed by new or existing systems; or
- Creating a comprehensive eligibility determination engine to apply new business rules.

Business Rules Repository
A business rules repository maintained by the Federal government, but including both Federal and State rules, is key to enhancing and encouraging collaboration around the clear expression of business rules. Documenting and displaying eligibility, entitlement and enrollment business rules in a standards-based format will be helpful for developers, while documenting and displaying the same rules in a human readable format will allow for greater transparency to the consumer and will aid consumer advocacy groups in explaining and assisting consumers with the eligibility and enrollment process.

To ensure maximum utility of this resource, we believe three representations of each Federal and State business rule should be included in this repository:

- *Business representation*: A consistent business representation of the rule (e.g., SBVR) such that an eligibility determination can be consistently interpreted and understood by business analysts;
- *Technical representation*: A consistent technical representation of the rule (e.g., RIF) such that common, Federal rules can be maintained and centrally reused; and
- *Consumer-friendly representation*: A consistent consumer-friendly representation of the rule such that consumers with varying literacy skills and language competency can clearly understand the basis for an eligibility determination using the rule.

Additionally, the open source forum referenced in Recommendation 3.2 is intended to be a resource for developers to use to exchange best practices, code and other information to ease development of Federal and State technology solutions implementing business rules. The open source forum is also intended to be a resource for States and others to store their own business rules (to support their own system development and generate consumer-friendly guidance), as well as a resource for States to share their business rules to reduce cost, complexity and time of

development. Ideally, Federal agencies and States should adopt a similar approach for other health and human service programs (e.g., SNAP and TANF) over time.

Federal agencies and States should also consider business rules when contemplating implementation and execution of the Workgroup's other recommendations. Federal agencies developing the Federal reference software in Recommendation 2.2, for example, should seek opportunities to use the business rules repository as a way of creating code that could be reused by States.